DOCUMENT RESUME

ED 241 739 CE 038 488

TITLE	Housing, Home Furnishings, and Equipment.
INSTITUTION	Texas Tech Univ., Lubbock. Home Economics Curriculum Center.
SPONS AGENCY	Texas Education Agency, Austin. Dept. of Occupational Education and Technology.
PUB DATE	Oct 83
NOTE	346p.
AVAILABLE FROM	Home Economics Curriculum Center, Texas Tech University, Box 4067, Lubbock, TX 79409-4067.
PUB TYPE	Guides - Classroom Use - Guides (For Teachers) (052)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Behavioral Objectives; *Career Exploration; Career Planning; Competency Based Education; *Consumer Education; Curriculum Guides; Disabilities; Disadvantaged; *Electrical Appliances; Energy Conservation; *Home Economics; *Home Furnishings; Home Management; *Housing; Interior Design; Occupational Home Economics; Secondary Education

ABSTRACT

Designed for use in consumer and homemaking education in Texas, this curriculum guide is on the subject of housing, home furnishings, and equipment. An introduction to the guide, covering its use and program and curriculum planning, provides a list of suggested readings. Information on teaching handicapped and disadvantaged students follows. The contents of the guide are divided into seventh and eighth grade homemaking; homemaking I, II, and III; and a semester course. Within each grade level are sections that begin with a list of competencies and corresponding subcompetencies. Concepts related to the competencies are outlined in the left columns. Learning and evaluation experiences to develop the competencies are listed in the right columns. Representative topics covered in the various grade levels are housing, design, energy and water conservation, career exploration, home interior, resource conservation, home management skills, interior decoration, renovation and remodeling of housing, career planning, home maintenance, selecting home furnishings and equipment, and consumer buying of home furnishings and equipment. Teaching aids keyed to learning and evaluation experiences and a reference list are located at the end of the guide. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

TX 8313301

ED241739

HOUSING, HOME FURNISHINGS, AND EQUIPMENT

Developed and disseminated by:

HOME ECONOMICS CURRICULUM CENTER
Box 4067, Texas Tech University
Lubbock, Texas 79409-4067

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

L Gossm

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Directed by:

Texas Tech University
College of Home Economics
Lubbock, Texas

In Cooperation with:

Texas Education Agency
Department of Occupational
Education and Technology
Vocational Home Economics Education
Austin, Texas

CE 038488

October 1983

ACKNOWLEDGMENTS

This *Housing, Home Furnishings, and Equipment* curriculum guide was prepared by the Home Economics Curriculum Center staff through funding from the Department of Occupational Education and Technology, Texas Education Agency, Austin, Texas, under Subpart 3, Program Improvement, of Public Law 94-482, in cooperation with the College of Home Economics, Texas Tech University, Lubbock, Texas. The Research Coordinating Unit, Texas Education Agency, coordinates all program improvement activities.

The persons listed below made special contributions to the development of this publication.

Members of the Advisory Committee provided input regarding content and reviewed drafts of the materials. The Advisory Committee members were:

Ramona Bailey, Waco
Jane Barrier, El Paso
Marian Bartram, El Paso
Iva Beck, Lamesa
Margaret Berry, Plainview
Terri Bowles, Rowlett
Coleen Bradley, Vega
Barbara Brown, Garland
Donna Brown, Tyler
Betty Carman, Justin
Cheryl Chastain, Graham
Jane Convery, Port Neches
Linda Corrie, San Antonio
Minnie Cyrus, Brookshire
Jackie Dean, El Paso
Ann Derrick, Amarillo
Pam Eastup, Justin
Linda Gibson, Kerrville
Susan Hargrove, Cleburne
Brenda Harris, Ft. Worth
Kim Harrison, Wellman
Shirley Frances Hayes, Galveston
Marie Helsley, San Antonio
Ella May Jessel, Wichita Falls
Joyce Lacy, Galveston
Glenda Leonhardt, San Saba
Melissa Lucas, Spring
Ingrid McClure, Brownsville
Marilyn McDonald, Ft. Worth
Melanie McGuire, Amarillo
Jessica McPeak, Amarillo
Kay Manning, Pottsboro
Patricia Milford, Irving
Pat Ogden, Waco
Tamara Perkins, Childress
Carol Peugh, Irving
Vicki Quarello, Dallas
Chery Roy, Galveston
Maria Ramirez, San Isidro
June Sales, Euless
Anna Stallings Smith, Mesquite
Debbie Smith, Lubbock
Jean Steel, Douglas
Pat Thompson, El Paso
Mary Ann Titus, El Paso
Janie Vandiver, Sulphur Bluff
Carol Waldrip, Mont Belview
Rosemary Webb, Dallas
Betty Weissinger, Abilene
Glenda Weldon, Waco
Joyce Winn, Knippa

Janis Lovell edited the materials.

Naama Maoz produced the artwork.

Cynthia Rowland designed the cover.

Shelly Robinson, Jan Bean, and Linda Crook, graduate research assistants, assisted in the development of the guide.

TITLE VI, CIVIL RIGHTS ACT OF 1964; THE MODIFIED COURT ORDER CIVIL ACTION 5281, FEDERAL DISTRICT COURT EASTERN DISTRICT OF TEXAS, TYLER DIVISION

TITLE VII, CIVIL RIGHTS ACT OF 1964; EXECUTIVE ORDERS 11246 AND 11375; TITLE IX, 1973 EDUCATION AMENDMENTS; REHABILITATION ACT OF 1973 AS AMENDED; 1974 AMENDMENTS TO THE WAGE-HOUR LAW EXPANDING THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967; AND VIETNAM ERA VETERANS READJUSTMENT ASSISTANCE ACT OF 1972 AS AMENDED IN 1974.

It is the policy of the Texas Education Agency to comply fully with the nondiscrimination provisions of all federal and state laws and regulations by assuring that no person shall be excluded from consideration for recruitment, selection, appointment, training, promotion, retention, or any other personnel action, or be denied any benefits or participation in any programs or activities which it operates on the grounds of race, religion, color, national origin, sex, handicap, age, or veteran status (except when age, sex, or handicap constitute a bona fide occupational qualification necessary to proper and efficient administration). The Texas Education Agency makes positive efforts to employ and advance in employment all protected groups.

TABLE OF CONTENTS

Page
ACKNOWLEDGMENTS iii

HOUSING, HOME FURNISHINGS, AND EQUIPMENT GUIDE
Contents of Guide 1
How to Use the Guide 1
Program Planning 2
Curriculum Planning 3
Suggested Reading 4

TEACHING HANDICAPPED AND DISADVANTAGED STUDENTS
Who Are the Handicapped? 5
Teaching Strategies for Handicapped Learners 10
Who Are the Disadvantaged? 14
Teaching Strategies for Disadvantaged Students 16
FHA/HERO for Special Needs Students 17

SEVENTH AND EIGHTH GRADE HOMEMAKING
Introduction to Housing 19
Individual Influences on Housing 21
Design 25
Energy and Water Conservation in the Home 30
Exploring Careers in Housing, Home Furnishings, and Equipment 32

HOMEMAKING I
Influences of Housing on the Family 35
Home Interior 39
Role of Creativity 47
Conserving Resources 48
Developing Skills in Management of the Home 51
Relating Knowledge and Skills in Housing, Home Furnishings, and Equipment to Jobs 54

HOMEMAKING II
Functions of Housing 57
Space for Housing 60
Housing for the Family 66
Interior Decoration 70
Renovation and Remodeling of Housing 77
Planning a Career in Housing, Home Furnishings, and Equipment 78

HOMEMAKING III

Page
Factors Affecting Housing Needs Throughout the Life Cycle 81
Cost of Housing 86
Evaluating Housing 92
Consumer Techniques 96
Home Maintenance 109
Starting a Business Related to Housing, Home Furnishings, and Equipment 116

SEMESTER COURSE

Functions of Housing 119
Factors Influencing Housing and Home Furnishings Decisions 126
Future Housing Trends 130
Types of Housing 133
Evaluating Housing 135
Management and Consumer Aspects of Housing and Home Furnishings 150
Design in Home Furnishings 165
Selecting Home Furnishings and Equipment 170
Consumer Buying of Home Furnishings and Equipment 178
Exploring Careers in Housing, Home Furnishings, and Equipment 183

TEACHING AIDS AND REFERENCES

Teaching Aids 187
Housing, Home Furnishings, and Equipment Reference List 303

HOUSING, HOME FURNISHINGS, AND EQUIPMENT GUIDE

Housing, Home Furnishings, and Equipment is one of seven subject area guides developed for use in consumer and homemaking education in Texas. Additional guides are available in the areas of Child Development; Clothing and Textiles; Consumer Education; Family Living and Parenthood; Food and Nutrition; and Home Management.

Contents of the Guide

Each subject area guide is correlated closely with the *Conceptual Framework and Basic Competencies for Vocational Home Economics in Texas.* Content for each subject area is based on the competencies needed by homemakers. Sub-competencies are identified for each competency. Content is developed through learning and evaluation experiences.

Each guide has colored dividers to indicate 7th and 8th Grade Homemaking, Homemaking I, II, III, a Semester Course, and Teaching Aids and References as follows:

7th and 8th Grade Homemaking – yellow
Homemaking I – orange
Homemaking II – green
Homemaking III – pink
Semester Course – blue
Teaching Aids and References – tan

Competencies and corresponding *sub-competencies* are listed at the beginning of each section. Competencies include the knowledge, skills, affective behavior and/or judgment needed by homemakers. Sub-competencies are the measurable behaviors expected to result from the completion of the learning and evaluation experiences. *Concepts* related to the competencies are outlined in the left columns. *Learning and evaluation experiences* to develop the competencies are listed in the right columns. Teaching Aids keyed to learning and evaluation experiences are located at the end of the guide. The *reference list* of books and sources of teaching aids will assist the teacher in developing a reference library.

How to Use the Guide

The subject area guides are designed to aid the teacher in identifying the concerns of seventh to twelfth grade students and the concepts appropriate for each grade level. The guides are not designed for use as a specific curriculum in any particular community or situation. Teachers will need to use their own judgment, initiative, imagination, and creativity in working cooperatively with students, parents, the school, and the community to develop an effective consumer and homemaking education program. The subject area guides are intended to guide, not dictate, the content of consumer and homemaking education courses.

Teachers should not expect to use all the suggested experiences in one class. Teachers may adapt, supplement, and expand the suggestions in view of the specific needs, interests, abilities, backgrounds, and levels of maturity of students. The variety of experiences included should enable teachers to select and use those teaching-learning experiences that will help their students reach the objectives the teacher feels are important. Many experiences can easily be adapted for use in FHA/HERO, home or extended experiences, or adult education.

Schools which do not offer all of the sequence courses outlined in this guide should consider combining content of different levels to meet local needs. Teachers and advisory council members should review the suggested course content for each sequence level and the competency needs of students enrolling in the courses offered. Competencies to be developed in each course should be selected by students' needs and backgrounds. This may involve including basic concepts covered in 7th and 8th Grade Homemaking in Homemaking I, or adding more advanced concepts from Homemaking III to Homemaking II. The subject area guide should be a valuable aid in local program planning and curriculum planning whatever the situation may be.

Program Planning

Effective program planning for consumer and homemaking education in the local community involves: (1) understanding the community, (2) understanding human growth and development, and (3) planning cooperatively.

Understanding the Community. Planning and carrying out an effective consumer and homemaking education program requires that the teacher understand the community in which students and their families live. A study of social, economic, and cultural conditions in the community will contribute to this understanding. Such a study involves determining the representative types of home and family backgrounds; and appraising community attitudes, prejudices, values, industries, practices, resources, influences, and power structures. Because patterns of home and community life largely determine the needs and interests of individuals, knowledge of the community can focus on the problems of everyday life for the student, and can serve as a basis for curriculum planning.

Understanding Human Growth and Development. The development of the individual from birth throughout life is characterized by the accomplishment of certain tasks at each stage of development. Understanding these tasks and the characteristics related to them is an important part of program planning in consumer and homemaking education. Knowledge of developmental tasks has several implications for the teacher. The tasks indicate types of problems for which students must seek solutions. The teacher must realize that individuals of the same chronological age are not necessarily in the same stage of development. Because tasks arise at or about a given time in the student's life, however, the teacher should be able to anticipate the teachable moment and to provide learning experiences which will meet the needs, interests, and abilities of students.

Cooperative Planning. Planning the consumer and homemaking education program cooperatively with students, parents, teachers, administrators, and others in the community has been shown to result in more effective learning and a better curriculum than would be possible in a program designed by the teacher alone. Students, parents, and community members may be involved through questionnaires, planning groups, and advisory councils. Professionally trained persons, including the school principal, other homemaking teachers, teachers in other subject areas, guidance personnel, and local and area supervisors also provide essential contributions. When preliminary plans have been developed, the teacher will want to discuss program planning with students to provide greater insight into their needs and interests.

Curriculum Planning

Curriculum planning is facilitated by identifying expectations for the students in the form of competencies and sub-competencies. What should the student know and be able to do at the completion of study? Concepts to be studied can be identified once the competencies and sub-competencies are known. The student then gains knowledge through the completion of appropriate learning and evaluation experiences. The competencies, sub-competencies, and concepts included in this book are only a guide. A careful evaluation of your particular teaching situation and student needs will be the first step in good curriculum planning.

Learning experiences in consumer and homemaking education may be provided through the classroom, home, community, and Future Homemakers of America/Home Economics Related Occupations (FHA/HERO). Students' interests are more easily sustained if a variety of experiences are provided for learning by seeing, hearing, feeling, and doing. The learning experiences suggested in this guide provide a variety of choices related to the concepts. They are designed to help students achieve the terminal performance objectives and the competencies identified. The teacher can select learning and evaluation experiences from those suggestions, or develop alternatives. The creative instructor will select, adapt, or add experiences to enable students to achieve the competencies.

Evaluation determines the extent to which students have reached the objectives and achieved the competencies designated for each course. Such evaluation is a complex task. Effective evaluation is a continuous process which involves determining behavioral objectives, collecting evidence of behavioral changes, interpreting the evidence collected, and using the evidence to improve the curriculum. The innovative teacher will rely upon a variety of methods in all domains of learning for student assessment.

Methods of evaluation include paper-and-pencil tests, oral tests, performance tests, check sheets and inventories, score cards, rating scales, behavior records, and observations.

A variety of teaching aids are needed for effective teaching. Such aids include transparency masters, audiovisuals, bulletin boards, games, resource kits, etc. The more approaches a teacher uses, the greater the chances all types of students will learn successfully.

Suggested Reading

Ahmann, J. Stanley, and Glock, Marrin D. *Evaluating Pupil Growth.* 5th ed. Boston: Allyn and Bacon, Inc., 1975.

Chamberlain, Valerie M., and Kelly, Joan. *Creative Home Economics Instruction.* New York: Webster Division, McGraw-Hill Book Company, 1975.

Cross, Aleene. *Home Economics Evaluation.* Columbus, Ohio: Charles G. Merrill Publishing Company, 1973.

Cross, Aleene A., ed. *Vocational Instruction.* Arlington, Virginia: The American Vocational Association, Inc., 1979.

Finch, Curtis R., and Crunkilton, John R. *Curriculum Development in Vocational and Technical Education: Planning, Content, and Implementation.* Boston: Allyn and Bacon, Inc., 1979.

TEACHING HANDICAPPED AND DISADVANTAGED STUDENTS

During the 1970's a dramatic civil rights movement for the handicapped and disadvantaged developed. In 1976, the Vocational Education Amendments placed greater emphasis than ever before on ensuring the right of persons with special needs to a free and equal education. The amendments require that a portion of the basic state grant funds be used for the handicapped and disadvantaged. These set-asides are intended to provide the additional educational services which handicapped and disadvantaged students may require. These students are often referred to as "learners with special needs."

The phrase "learners with special needs" is used to describe students with different, unique, exceptional, or highly individualized wants or demands that must be satisfied for them to succeed. The phrase points out the necessity for finding a personal solution to each student's learning problems. Any student who has not been making normal progress and who appears to be heading for failure in school may be identified as a learner with special needs. Thus, special needs is an umbrella term used to describe all handicapped and disadvantaged students.

Specific legislation providing for their educational rights includes Section 504 of the Rehabilitation Act of 1973, signed in 1976, which established a mandate to end discrimination of the handicapped and to get them in the *mainstream* of American life. In the same year, Congress passed the Education of Handicapped Children Act. Together, these set forth a comprehensive scheme of federal civil rights legislation for handicapped persons.

The provisions of this legislation make it mandatory that vocational education provide a free and appropriate education to handicapped students in the "least restrictive environment." This term is interpreted in regulations stating that "each agency shall insure. . .to the maximun extent appropriate, that handicapped children. . .are educated with children who are not handicapped." Further, handicapped students are to be ensured an equal opportunity to participate in and benefit from programs and activities receiving federal assistance. In sum, the civil rights legislation affords handicapped students the same right to vocational education as nonhandicapped students.

Mainstreaming is a term which refers to the enrollment of identified special needs students in regular classes. Mainstreamed students are placed in the regular classroom with the provision of special education support services. The term is used to describe the process of equipping handicapped students for entry into the "mainstream" of society, as mandated in Public Law 94-142. The term also applies to the placement of disadvantaged students in regular classes.

Who Are the Handicapped?

A national profile by handicapping condition of students in vocational education mirrors the profile of handicapped students in special education. According to the Vocational Education Civil Rights Survey, slightly more than 36 percent of the handicapped persons enrolled in vocational education are mentally retarded, and 37 percent have a specific learning disability. The remaining 27 percent are identified by one of nine other handicapping condition. Of these, seven percent are seriously emotionally disturbed, two percent are orthopedically impaired, three percent are visually handicapped, and four percent are deaf or hard of hearing. Of the remaining group, ten percent is listed as "other health impaired," and five percent are multi-handicapped. (See Table 1.)

TABLE 1

HANDICAPPED POPULATION SERVED IN VOCATIONAL EDUCATION AND SPECIAL EDUCATION, BY HANDICAP[1]

	Percent of Handicapped Population Served in Special Education[2]	Percent of Handicapped Population Served in Vocational Education[3]
Mentally Retarded	21.8	36.5
Hard of Hearing	1.0	2.6
Deaf	1.0	0.9
Speech Impaired	29.4	2.7
Visually Handicapped	0.8	2.5
Emotionally Disturbed	8.2	7.3
Orthopedically Impaired	1.6	2.4
Learning Disabled	31.7	36.8
Deaf-Blind	0.0	0.2
Multi-Handicapped	1.5	4.6
Other Health Impaired	2.6	9.9

---

[1] Charlotte A. Conaway. "Vocational Education Serves the Handicapped" *VocEd,* (April 1981), p.3.

[2] National Summary "State Agency Reports of Handicapped Children Receiving Special Education and Related Services," 1979-1980.

[3] Based on data from Vocational Education Civil Rights Survey-1980, Comprehensive High Schools and Area Vocational Centers (preliminary unedited survey data).

13

Mentally Retarded Students

Mentally retarded students function below average in the areas of intellectual, physical, and emotional development. Mentally retarded persons are capable of learning homemaking skills. However, as homemakers they will not have the constant supervision often given on the job. They must learn to make their own decisions and care for their own families as well as themselves if they are to live independently.

Characteristics of mentally handicapped students are listed below. The student:

- –may be of average physical size, but be uncoordinated and awkward
- –may have multiple handicaps
- –may perform poorly on intelligence tests, but may be "street-wise"
- –may function poorly in school and present behavior problems
- –may have short attention span, lack of concentration, learn at a slower rate, and have a lower capacity for learning
- –may be easily frustrated due to repeated failures
- –may have a lower resistance to disease and infection
- –may possess handicapping conditions varying from mild to severe or profound
- –can handle concrete learning more effectively than abstract
- –can learn to do skilled and unskilled work
- –can be employable.[4]

Emotionally Handicapped Students

The emotionally handicapped student's behavior may be unacceptable for the student's age level. The behavior may interfere with the student's own growth and development as well as with the well being of others. Some emotionally handicapped students' growth and development is affected by their withdrawal from the environment. Other students cause disruptions around them by constant conflict.

Characteristics of emotionally handicapped students are listed below. The student:

- –may not handle stress well
- –may demonstrate explosive behavior
- –may have a negative self-image and exhibit hostility
- –may have a short attention span and be difficult to motivate
- –may use demonstrative behavior (kick chairs, slam doors, use obscene language) or be extremely quiet and withdrawn
- –may be easily frustrated due to many years of failure
- –may need positive reinforcement
- –may function more effectively in a structured but flexible environment.[5]

---

[4] Gloria E. Durr. and Camille G. Bell. *Mainstreaming Strategies in Home Economics.* (Lubbock, Texas: Home Economics Instructional Materials Center, Texas Tech University, 1980), pp. 6-7.

[5] Ibid., p. 7.

Learning Disabled Students

Students with learning disabilities are achieving less than their potential. They are normal in most respects, but have definite disabilities in one or more areas of development. Often their disabilities involve comprehension or the use of language. As a result, these students may exhibit difficulties in spelling, writing, and calculating.

Characteristics of learning disabled students are listed below. The student:

- may be behind in grade classification and reading ability
- may appear to be highly active, impulsive, restless
- may be uninhibited in speech and disorganized in thoughts and actions
- may exhibit frequent and sudden changes from explosive to docile behavior
- may display distracting or disruptive behavior to gain attention
- may have short attention span and be difficult to motivate.[6]

Deaf and Hard-of-Hearing Students

Because hearing loss is not as obvious as other disabilities, it is sometimes referred to as the "hidden handicap." Even a mild hearing loss interferes with learning and communication. Because it is not obvious, the symptoms of a mild hearing loss are easily misinterpreted as behavior problems. Students with mild to moderate hearing loss need to be encouraged to use residual hearing.

Students whose hearing is so impaired that they have problems understanding auditory information with or without a hearing aid or device are considered deaf. Without the ability to receive auditory communication deaf persons must rely upon their eyes for signals which represent ideas. The greater the hearing loss, the more the individual must depend on visual cues. Students with hearing losses might rely on an alternate communication systems, such as lip reading, sign language, or written language.

Speech Impaired Students

Speech problems may include articulation problems, stuttering, impaired hearing, cleft palate, cerebral palsy, or voice. Some speech disorders, such as stuttering, occur in isolation. Other speech disorders are associated with handicaps such as deafness, mental retardation, or cerebral palsy. Speech is generally considered impaired when it "deviates so far from the speech of others that it calls attention to itself, interferes with communication, or causes the individual to be self-conscious and maladjusted."[7]

Deaf persons experience varying degrees of speech impariment, but they can learn to talk. However, speech and language skills are difficult for deaf persons to develop. Early treatment and special training can enable persons with severe hearing impairments to learn sufficient language skills to communicate.

Speech is the communication tool most used in relating to others. For this reason, a speech handicap can be a social handicap. If others respond unfavorably to a speech handicap, the student may be inhibited or withdrawn into a world of silence. The result may be impaired social development and a poor self-image.

---

[6] Ibid., p. 8.
[7] Ibid., p. 22.

Blind and Visually Impaired Students

The visually impaired student may have a vision loss ranging from slight impairment to complete loss of sight. The extent of the individual's handicap is influenced by the age of onset of visual loss, degree of loss, and cause of impairment.

Persons are considered *visually handicapped* if they see no better from 20 feet what persons with normal vision see from 70 feet. The visually handicapped required special aids or devices to read standard printed material. A person is designated legally blind when with the best correction, the person can see less from 20 feet than a person with normal vision can see from 200 feet, or when the field of vision is limited to a narrow angle of less than 20 degrees. Most blind students have some useable vision, but have problems such as cloudy, blurred, or double vision; spots; loss of side vision; or loss of central vision.

The social skills of a visually impaired student are often affected by the restricted ability to get around in the environment. In addition, emotional problems may develop as a result of negative attitudes of others.

Physically Handicapped Students

The physically handicapped student has some degree of health or physical impairment that limits actions or mobility. Physically handicapped students have a special condition which may be caused by disease, may have existed at birth, or may be the result of amputation. The range of physical disabilities includes orthopedic impairments, neurological impairments, and other health impairments. Orthopedic impairments include paraplegia, quadriplegia, and amputations. Students may be missing limbs or portions of limbs which restrict mobility. Crutches, wheelchairs, and other essential equipment call attention to these disabilities for many orthopedically handicapped students. These students often encounter public reactions such as embarrassment, staring, or avoidance.

Neurological impairments include cerebral palsy and epilepsy. Other health impairments range from diabetes and nephrosis to osteomyelitis. These physical impairments vary by the degree of the handicap, the stability of the condition, and the length of time the individual has had the condition.

Physically handicapped persons are very conscious of their movement restrictions. Their frustration may be expressed in inappropriate social behavior. Such frustration may cause the individual to become verbally aggressive, blame other people, repress desires, withdraw into fantasy, degrade the original goal, act less mature, and compensate for the disability by shifting to different interests. These possibilities emphasize the impact the reactions of family, peers, and the public, as well as the student's own perception of the handicap, have on the student's progress, attitude, and success.

Health Impaired Students

Students with severe or chronic health problems, such as epilepsy, cerebral palsy, amputation, hemophilia, spina bifida, cystic fibrosis or diabetes, are classified as *health impaired*. Many of these students have trouble keeping their bodies functioning normally.

The extent of health impairment can vary greatly. Mild conditions may not be readily apparent. Moderate conditions may be very evident to the teacher. Students born with a health impairment are more likely to have made satisfactory adjustments to it. More recently handicapped students usually have a more normally developed set of experiences and abilities. Researching the student's potential is vital to understanding the student's capabilities.

Multi-Handicapped Students

A multi-handicapped student has a combination of two or more handicaps. Knowledge of each handicapping condition is essential in working with the student. Observation and study are necessary to understand the extent of the student's abilities and limitations.

Teaching Strategies for Handicapped Learners

Making the transition from school to adulthood is a giant step for most young men and women, but especially for those who are handicapped or disadvantaged. Consumer and homemaking education has a major role in teaching handicapped and disadvantaged youth homemaking skills which will help them take that giant step. The teaching strategies suggested here have been synthesized from literature on teaching the handicapped and disadvantaged student.

In order to live independently, they need the same homemaking skills as other students. Consumer and homemaking education teachers face the challenge of teaching handicapped and disadvantaged persons effectively, of providing adequate support services, of expecting an equal level of skill acquisition by all students, and of ensuring that skills taught are adapted for each special needs student's most efficient learning.

Home economics teachers need to recognize that many of their special needs students have not spontaneously picked up the homemaking skills their other students have picked up at home. Therefore, the teacher's impact on these students can be potentially greater and far more important than the impact on the normal individuals. The homemaking teacher's impact on normal individuals may be the difference between being an average homemaker or a good homemaker. With special needs students, the difference may be between being able to live independently and being partially or totally dependent on others. Teachers also need to recognize that most special needs individuals in their classes are capable of learning anything taught in those classes. But how they learn and how long it takes to learn are quite varied.

Henry Viscardi at the White House Conference for Handicapped Individuals in 1977 said that the most difficult barriers for handicapped people are "not narrow doors and rigid curbs, but narrow minds and rigid stereotypes." The same is true of the disadvantaged. When mainstreamed students are enrolled in classes, teachers must reconstruct their mind-sets so that psychological barriers can disappear.

Often the teacher's first exposure to special needs students is the day such a student enters the classroom. This lack of experience often causes teachers to feel uncomfortable and unprepared. The teacher must first accept the reality of the handicap before being able to see all the things the student is capable of as a person. This initial attitude of acceptance is crucial and is one of the important variables for the success of the special needs student.

Next the teacher must make an effort to learn about some of the aspects and the nature of the student's handicaps or disadvantages. The teacher can become knowledgable about specific needs and problems through access to the student's file and through communication with the special education teacher, the counselor, and the student. Only if the teacher feels confident in knowledge of the student's needs can the teacher be successful.

Lesson Planning

The first step in lesson planning is to identify the basic content and skills which are the same for *all* students. The teacher who has clearly identified what is to be learned, why it is to be learned, and ways and means to measure whether it has been learned, can focus greater attention on how it can be learned. By varying teaching styles and individualizing learning activities, the home economics teacher can provide for all students without labeling special needs students and making them conspicious within the group.

To be successful in teaching special needs students, the methods must be individualized. Planning activities with special needs in mind is essential. The very nature and variety of handicapping conditions indicates that there is no one method or technique that will always fit a certain handicap or that will fit all handicaps. Persons with the same handicap or disadvantage will vary in their response to it. Thus, each unit of instruction must be "tailor-made" for each special needs student in the class.

One solution to the challenges posed by a class of students with varying abilities is to group students by ability level for some activities. This allows the teacher to plan activities which fit the learning styles and needs of each group. It gives the average student a chance to cover more content and to work toward higher levels of learning. It also gives other students, such as the educationally disadvantaged or the mentally retarded, an opportunity for more teacher-student contact, extra time to cover content, and a chance for repetition and drill if needed. Class time can be divided into

1) large group discussion and teacher-directed activities, and/or
2) small group activities specially designed to meet each group's needs.

Small group activities could be designed to suit the audio learner, the visual learner, and the kinesthetic learner. Objectives and evaluation methods may be the same or different, but time spent in groups can be the same. The teacher can rotate among groups, or spend time directing the activities of one or more groups.

Some teachers make effective use of learning centers. Use of varied teaching methods and materials provides students with opportunities to grow at their own levels of conceptual development. This contributes to their sense of achievement. Peer tutoring works well in learning centers. Through participation in the activities of the center, special needs students have opportunities to interact with their peers and to experience success. Through tutoring they may experience a one-to-one learning situation which can be of value to the tutor as well as to the special needs student.

Special needs students should be evaluated, when possible, by methods that require a minimum of reading and writing. Students with learning difficulties can be asked to explain or to demonstrate in some way the concepts they have learned.

To evaluate fairly *all* students in the class, the following procedure is useful:

1) Determine the objectives to be achieved.
2) Determine entry-level behaviors by pre-test or other means.
3) Monitor and record progress toward achievement of objectives.
4) Measure achievement of objectives.
5) Translate progress toward achievement of objectives into the school's marking system.

Grading students in reference to a criterion reduces the frustration students feel when they are compared with each other.

1) Establish reasonable rules for the conduct of all students and be consistent in your expectations for student behavior.

2) Avoid being overprotective or overcompensating toward handicapped students by encouraging all students to be independent.

3) Provide handicapped students with space and time needed to complete tasks and avoid completing tasks yourself or allowing other students to complete them.

4) When appropriate, help students to learn to manage time and develop compensatory techniques to increase speed and ability and to help them keep pace with classmates.

Strategies for Mentally Handicapped Students

When teaching a skill to the mentally retarded, keep the following points in mind:

1) Break the skill down into simple sequential steps that can be repeated until the whole skill is learned.
2) Provide stimuli in a number of ways, through learning, seeing, and touching, all of which reinforce learning.
3) If a poor memory slows learning, review instructions frequently.

Since constant reinforcement is essential for mentally retarded students, demonstration is an excellent teaching technique. But demonstrations may need to be repeated several times. Establishing a set routine for activities, like preparation and cleanup in foods lab, helps retarded students learn what is expected of them.

Because mentally retarded students have short attention spans, lessons should be short and concise. When work is assigned, the amount should be limited. Before beginning a learning experience, review the previous information and materials on which it is based. Lessons should be planned so that repetition of tasks is possible. In presenting information on giving directions, use as few words as possible and only those that are familiar to the mentally retarded student.

Strategies for Learning Disabled Students

The learning disabled student is not mentally retarded, but uneven in development. The student's weaker areas can be evened out with step-by-step, structured teaching. Such teaching uses more than one sense—tactile, visual, kinesthetic and auditory techniques. This method of learning from all angles is effective for most students, but especially for learning disabled students.

Adaptations for learning disabled students must be designed to fit each student's learning style. Learning disabled students need extra help with such concepts as spatial orientation, reading, listening, writing, speaking, instructions, motor tasks, and tactile discrimination. Most learning activities can be designed to allow for these.

Social awareness of learning disabled students is often affected by their comprehension and perception problems. These problems often cause these students to fail to sense things that others would notice right away. Perceptual problems may result in incomplete information about others, such as failure to correctly interpret body language. The student may talk too much or laugh too loudly. The student may be unaware of irritating personal habits such as squirminess or excessive movement. The student may have a poor self-image but have no idea why others display dislike. Because the student does not catch on to jokes, he or she may become the butt of ridicule. On the other hand, the student may see something as amusing because the learning disability emphasizes the double meanings of some words. As activities are provided in a way that enables the learning disabled student to meet with success, some of these problems will fade into the background.

Strategies for Physically Handicapped Students

Various accommodations may be needed to make consumer and homemaking education classes accessible to physically handicapped students. Individual teachers can do a great deal to make their classes more accessible to physically handicapped students.

An *accommodation* (also called an adaptation) is a modification of a work place or the work itself which enables a physically handicapped student to perform. An accommodation can be as simple as wrapping a strip of foam around a pencil so that it is easier to grasp, or as complex as using an electronic arm to reach objects. The best solution to a student's individual problem is often the result of the teacher's and/or student's ingenuity.

By looking first for the simplest, most natural solution, simple, inexpensive accommodations are often found. Creative, step-by-step approaches to problem-solving yields solutions which are readily available, cost-effective, flexible, and attractive. However, solutions should be re-evaluated periodically to be sure they continue to meet the student's needs.

Changes in placement of furniture and materials or controls are often helpful for handicapped students. Modifications can mean changes in classroom and laboratory facilities, designing flexible work areas, or purchasing standard equipment with a view to special needs and adaptations. Some of these changes may be as simple as raising a work table so that a wheelchair can fit under it. Storage drawers and shelves can be labeled with Braille. Kitchen tools can be labeled by letter rather than color, so that a color-blind student can return tools to the correct storage area. When equipment is ordered for a new foods lab, a range which has burner and oven controls at the front will permit a student in a wheelchair to reach them.

Standard tools can be modified or assistive devices provided. Assistive devices use the principles of simple machines (lever, wheel, inclined plane) or mechanical power to aid or replace physical function. These devices can often be made from scrap materials or by using common equipment in new ways. Sometimes they can be borrowed from libraries, universities, or community health agencies. Assistive devices can also be purchased from rehabilitation supply catalogs. Some sales catalogs which do not specialize in rehabilitation contain gadgets useful to handicapped students.

Examples of these include a braille label maker, which can be used with a visually handicapped student to label containers; an elbow-length oven mitt to protect the arm of a student who does not sense heat; and a C-clamp which holds fabric to the table while the student who uses only one hand measures and cuts it. Complex devices such as splints, hearing aids, and vision aids must be fitted by qualified professionals. Training in their use may be necessary.

Different movements can often be used to perform a task which the handicapped student cannot do in the usual way. Special education consultants may suggest that one body part or sense can be substituted for another. The student may have good ideas for approaching usual tasks in more individual ways. For instance, if one hand is weak, the student may be able to hold a bowl between his or her knees while mixing with a spoon. The student with a vision problem may be able to tell the difference between similar substances like salt and sugar by smell or taste. A sewing machine foot pedal can be placed on the table and operated with the elbow if needed.

Sometimes the best approach is to restructure the job for a handicapped student, much as rehabilitation counselors do in employment situations. Making an accommodation in job structure or design usually involves changing work schedules or job descriptions. For example, the student might need to send laundry out instead of doing it at home, to learn simple ways to garnish a purchased cake to save energy, or to select self-help clothes for a child.

Whatever the solutions, the teacher needs to observe carefully and consistently to make sure that the student's needs are reflected.

Who Are the Disadvantaged?

The terms *disadvantaged, special needs,* and *special populations* are used interchangeably to refer to minority groups such as Blacks, Asian Americans, American Indians, and Hispanics, especially those at poverty or low-income levels. All culturally different minorities are not disadvantaged. Some members of the majority culture are disadvantaged. However, cultural minorities have often been denied advantages enjoyed by the majority culture in the United States. The 1968 Vocational Education Amendments define the disadvantaged as "persons who have academic, socioeconomic, or other handicaps that prevent them from succeeding in the regular vocational program." Their education requires more extensive services. Without these services, disadvantaged students may become dropouts. The 1976 Amendments attacked this problem by setting aside a portion of federal vocational funds to pay for the extra costs of moving disadvantaged students into the mainstream of vocational education. In 1978, according to USDE figures, vocational education served approximately two million disadvantaged students. Consumer and Homemaking Education teachers are in a unique position to help these students prepare for life in the larger society, while developing respect for the unique cultural differences represented in the classroom.

Characteristics of Disadvantaged Students

Characteristics of disadvantaged students are listed below. The student:

- may be a poor achiever
- may live in a low-income family
- may lack language skills because of poor language development and inability to speak standard English
- may read at the fourth to sixth grade level
- may have an acquired dislike of school
- may pose discipline and attendance problems
- may have a poor self-concept
- may lack social skills for group participation
- may tend to be aggressive
- may have values and attitudes which are representative of a particular culture and of lower socioeconomic group

–may fear failure because of previous experiences in school
–may be slow in the performance of intellectual tasks
–may have poor work habits
–may tend to give up on tasks which provide no immediate sense of accomplishment
–may have a short attention span.

In summary, disadvantaged students suffer from rejection in society as well as in school. They often believe that the dominant group is responsible for their past and present segregation, limitations, and restrictions. They are aware and resentful that society has not offered them equal opportunities. They know that there has been serious interference with the exercise of the human and civil rights to which they are entitled. The consumer and homemaking education teacher must recognize the reality of these experiences and make every effort to assure that the students are welcome in the program and that everything possible is being done to make sure they learn.

Challenges to Teachers of the Disadvantaged

One of the greatest challenges facing the teacher of minority students is one of developing a positive and supportive attitude. Attitude is extremely important because it determines how the teacher treats the students. The teacher's treatment affects the student's attitudes toward school and ultimately the student's performance and success. Negative attitudes often stem from false stereotypes. Such stereotypes may result from often repeated generalizations about a cultural group and be supported by stereotypic stories and jokes. As a result of negative attitudes the teacher may convey to the student feelings that the student cannot succeed. Accordingly, the student fails. If, however, the teacher becomes familiar with cultural backgrounds and accepts students as individuals, the old stereotypes will seem less and less appropriate and the teacher's attitudes will become more and more positive.

Negative attitudes toward minority students are to a large extent the result of lack of knowledge about their cultures. Much emphasis has been placed on the problems these students have. However, teachers need to be aware that these students have strengths as well. These strengths often include acceptance of responsibility at an early age, ability to learn through concrete experiences, adherence to family and group rather than individual values, and good physical coordination and visual orientation.

Teachers are often apprehensive about teaching minority students. They may associate these students with a lack of success and unpleasant experiences. They may have been unsuccessful in previous attempts to teach minority students. They may feel unable to deal with problems often associated with minority students such as poor health, drug and alcohol problems, and poor housing and home conditions. To alleviate these fears the teacher should learn about the support services available in the school and community which can assist in dealing with these problems.

Teachers often feel uncomfortable communicating with minority students because they are not familiar with the students' language. When the language is a foreign one, the teacher can improve communications with students by learning the language. When the barrier to communication is nonstandard English, the teacher may have to learn from the students. Ability to communicate with students is extremely important since language plays such an important role in the student's life. If the student's language is rejected, the student may feel rejected and become less able to learn.

Another cause of difficulties in working with minority students is low expectations. Research shows that student learning is positively correlated with teacher expectations. However, it is not unusual for teachers to expect less of minority students than they do of other students.

Social, cultural, and economic deprivation affect learning. Deficiencies in language and reading skills are especially evident among the disadvantaged. In addition, disadvantaged students may not have been exposed to many concepts which are familiar to other students. For example, table setting might be very familiar to the middle-class student, but to students living in families without enough pieces of flatware to go around, it may be quite unfamiliar. In addition, factors that motivate the disadvantaged to learn may differ radically from those that motivate the middle-class person. Middle-class students may be motivated by grades, a diploma, or learning for the sake of learning; disadvantaged learners may need something more tangible and immediate to motivate them to learn, such as being able to see how they can use the information *now*. Bilingual teaching may facilitate learning for some students.

All students have a need to be successful. Failure deprives them of the satisfaction of that need. Some students who fail fight back aggressively. Others withdraw, stop trying, and become non-learners. Some get physically sick. Many drop out. To prevent these outcomes, the teacher must provide opportunities for success. The student then needs praise. Success on a small scale and praise will motivate the student to greater success in the future.

Suggested instructional strategies are as follows:

1. Reflect the cultural backgrounds of students in the classroom. Provide role models with which ethnic minorities can identify. Select textbooks and teaching aids which are multicultural. Invite guest speakers from the minorities represented in the class. Use pictures of persons from various cultural backgrounds on bulletin boards. Include ethnic foods, clothing, family patterns, child rearing practices, architectural styles, consumer problems, etc. in planning instruction.
2. Use instructional materials and methods which promote cultural understanding. If materials available do not promote cultural understanding, seek supplementary materials which do.
3. Help disadvantaged students learn by simplifying difficult tasks and presenting them in ways that will make them easier to grasp.
4. Adjust your teaching style to fit the learning styles of your students. Make sure also that the material taught is relevant to the student's life and needs. The teacher must understand the community and the disadvantaged within it. Relate instruction to the student's direct experience whenever possible.
5. Make an effort to involve all students in learning activities. Take advantage of student-initiated ideas to increase participation and interest.
6. Involve parents of minority students. This will require encouragement and interesting activities. Most of all, it will require a teacher who is an energetic organizer and who can get along with people. The effort to involve parents will pay dividends in increased student interest and increased parental support.
7. Help students to learn to evaluate themselves and assess their own progress. Evaluate students' efforts promptly, provide feedback, help students learn from their mistakes, and show them where and how they can improve.
8. Be honest with minority students. Don't give a rosy appraisal of problems. Honesty is an important way to establish rapport and develop the respect of these students.
9. Make instructions practical and basic. Explain *how* first; *why* later. Minority students are often said to learn best by doing; however, many educators believe this is equally true for all students.

23

10. Reward success. Since failure has been a common experience for many minority students, each success should be rewarded. It may be necessary to reward small steps to ensure that the student will eventually reach the objective or achieve the competency. Consumer and homemaking education classes provide many opportunities for producing tangible products which provide evidence of achievement. Students can see that they have baked a tasty bread, drawn a neat floor plan, made an attractive garment, planned an effective budget, or created an exciting toy. Consumer and homemaking education courses also make students feel self-sufficient, an attitude needed to function as an adult.

FHA/HERO For Special Needs Students

FHA/HERO (Future Homemakers of America/Home Economics Related Occupations) provides special needs students experiences they need to develop their full potential for living satisfying lives. These experiences benefit special needs students in several ways:

1. The experiences contribute to the student's sense of accomplishment and pride.
2. The activities of the organization provide students an opportunity to learn to work together.
3. Organization activities give the students the opportunity to learn from the teacher on an informal basis.
4. The organization provides recreational and social activities that help students develop wholesome relationships with others and desirable social skills.
5. Adult sponsors can set an example which helps students develop their own moral and ethical standards.
6. Participation in the organization helps students learn democratic principles.
7. Students learn to carry through on their own ideas and plans.

Through these experiences FHA/HERO can help the special needs student develop a sense of identity, a positive self-concept, independence, self-control, healthy relationships with others, moral and ethical values, and democratic and citizenship skills.

Special needs students often fail to pursue membership in youth organizations. These students may feel membership is too expensive or too exclusive. Membership may require more commitment than the student is willing to make. Several adaptations can enable FHA/HERO to develop the potential and talent of special needs students. These adaptations should enable the special needs student to try out ideas, to find someone who will listen, to permit mistakes without penalty, to build on successes, and to develop self-confidence.

Students should be made aware that the student organization is an important part of the Consumer and Homemaking Education program. A variety of techniques can be used to motivate students to participate:

1. Convey your own positive attitudes toward the organization to students.
2. Spend time in class describing the organization, utilizing slides, films, brochures, or speakers to motivate students to participate.
3. Inform parents of the purposes and value of the organization.
4. Utilize interested students in motivating other students to participate.
5. Give students the opportunity to participate in the organization's activities as quickly as possible.

Supervising Activities of the Vocational Youth Organization

To ensure continued participation, the teacher must integrate the activities and principles of the student vocational organization into everyday classroom and laboratory experiences. This helps students realize the value of the organization. Operating the organization as a part of the curriculum allows chapter information to become a part of classroom activities. Such an approach increases the frequency of communication about chapter activities and helps to maintain a high level of interest. It also helps students to see the relationship between FHA/HERO activities and their futures as wage earners, family members, and citizens.

Special needs students should be provided the same opportunities for personal growth and leadership development as other vocational students through participation in vocational youth organizations. Students need opportunities for leadership roles and active participation at all levels. Students should run for and hold offices. The chapter should have a full slate of officers and work through student committees to plan school and community activities. Students should be guided in learning the procedures of self-government through actual practice. They should have opportunities to participate in organization activities involving other chapters at local, area, state, and national levels.

Activities are appropriate for all FHA/HERO members for helping students develop the skills every young person must have to succeed in the world of work. Students can become involved in such activities as school-community projects, student recognition ceremonies, public relations, and competitive events. Activities of the organization provide excellent opportunities to increase public awareness of the potential of special needs students.

FHA/HERO can involve every special needs student through such activities as school-community projects and public relations. The teacher can encourage participation by providing motivation and rewards for efforts. Community activities might include school beautification projects, school bulletin boards, school stores, and lunchroom cleanups. Students can conduct anti-litter campaigns, organize walk-a-thons, talk-a-thons, and bike-a-thons, give assistance to projects organized by local civic clubs, or adopt grandparents in nursing homes. Club members can work at training centers for retarded children or adults and provide entertainment for those centers. The chapter could sponsor a radio show to publicize consumer and homemaking education. These activities can provide high visibility, bring instant recognition, and provide constant reinforcement to participants.

Participation in area and state FHA/HERO meetings can provide important new experiences for special needs students. These meetings may provide the student's first long trip away from home or the student's first view or a different geographical area. The cost of these meetings are within reach of all students or clubs. Sponsors can be found for those in severe need, or students can cooperate in fund-raising activities to finance their trips.

SEVENTH AND EIGHTH GRADE HOMEMAKING

HOUSING, HOME FURNISHINGS, AND EQUIPMENT
SEVENTH AND EIGHTH GRADE HOMEMAKING

COMPETENCY: *Ability to determine the significance of housing to individuals*

SUB-COMPETENCIES: *Identify needs for housing.*

Describe expectations people may have for housing.

Determine factors outside the family which influence housing.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
A. Introduction to Housing 1. Needs for housing	Brainstorm to identify needs met by housing. List the needs on the chalkboard. Did the list include shelter, protection, psychological needs, safety, security, and comfort? Give examples of how housing helps meet your needs. Use the needs listed in the previous experience to develop a personal list. How can one's feelings be affected by housing? [NOTE TO TEACHER: The following feelings or their opposites can be stimulated by housing: security, independence, happiness, pride, well-being, comfort, isolation, etc.]
2. Housing expectations	Illustrate your housing expectations by drawing a "before" and "after" picture of a room in your home or a room in the home economics department. In the "before" picture, draw the room as it looks now. In the "after" picture, draw the room to include the changes you could make in order for the room to meet your housing expectations. For example, your expectation may be a comfortable place to watch television. A change to meet this expectation could be making a new pillow for the sofa. Other changes might include rearranging the furniture, adding a new plant, discarding a worn-out item, or adding something to show a hobby or interest. Share with classmates how the changes made in the "after" picture help meet your housing expectations, and in turn, meet your housing needs. What are some ways you can make the most of the house you have now? View Teaching Aid 1 on changing housing expectations. Discuss how housing expectations have changed through the years. Play a game to gain a better understanding of how housing expectations have changed. [NOTE TO TEACHER: To make the game, take 3" X 5" cards and write an old or new housing expectation on each. Give students one card each and have them find their corresponding partners.

CONCEPTS **LEARNING AND EVALUATION EXPERIENCES**

Examples: candles–light bulbs; wood stove–range; water pump–faucet; radio–television; encyclopedias–computers; scrapbuckets–disposals; quilt--electric blanket; rocking chair–recliner; etc.] After matching housing expectations, work in matched pairs to give examples of changes which have taken place in the home. Share your examples with class. Discuss future changes which may make today's expectations obsolete.

3. Factors influencing housing

View Teaching Aid 2 to identify factors outside the individual and family that influence housing. What other factors can you think of? Which factors may become more important in the future?

Work individually or in small groups to prepare a poster illustrating houses and the factors which influence housing. Use magazines and newspapers as resources for pictures or draw your own pictures. Present your poster to the class, explaining the various housing influences shown in each picture. Which houses show more than one influence? Which influence was the most prevalent in the class posters?

Analyze your home or a home in your community to identify factors which have influenced housing. Ask family members and persons in the community for their opinions. Share your findings with class. Which factors have had the most significant influence on housing in your community? Which factors have had a lesser influence?

Draw a map of your neighborhood; include shopping areas, schools, churches, recreational facilities, etc. Indicate factors outside the family which have influenced the location and space for such facilities and for the housing in your neighborhood.

Interview someone who has lived in your neighborhood or community for a long time. Ask the person what changes have taken place in the types of housing available. What factors outside the family influenced housing changes? Share your findings with class.

COMPETENCY: *Ability to analyze how the individual influences housing*

SUB-COMPETENCIES: *Justify the living space needs and wants of individuals.*

Describe human factors influencing housing.

Analyze factors involved in caring for space.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
B. Individual Influences on Housing 1. Needs and wants	Define *needs* and *wants*. List the factors which influence teenagers' needs and wants related to housing space. Discuss the statement: "One person's wants are often another person's needs." Explain how an item which is a need for one person may be a want for another person. [NOTE TO TEACHER: Personal items which might influence a teenager's space needs include sewing machine, tennis racquet, bicycle, band instrument, baton, etc.] Do needs and wants change for an individual over a period of time? Explain. Discuss how personal space is influenced by a person's needs and wants. Examine the benefits which your home provides by completing open-end sentences. Write your answers on a sheet of paper so you can look back over them. Complete these sentences: 1) When I want to be alone . . . 2) My bedroom is . . . 3) When I want to study . . . 4) My friends come to my home . . . 5) When my friends come to my home, my family . . . 6) When I want to talk with my father or mother . . . 7) My drawers are not to be opened by . . . 8) When I am away from home . . . Study your answers and those of class. Discuss the various methods families use to meet the housing needs of family members.
a. Organizing personal space	Define *personal space*. What areas are your personal space in your home? What areas are personal space of other family members? How do you acquire personal space areas? Why is personal space important? How would things be different if you did not have any personal space? When is personal space most important to you? Describe a special place in your home where you can go to be alone or that you consider your personal space. This place might be your favorite chair, your closet, your desk, a pillow, a special window, your garden, or many other places. Why is this space important to you? How has this space changed over time in its importance to you? View Teaching Aids 3-10 on planning and organizing personal space. How can you apply the guidelines from the Teaching Aids to your personal space? What are some other guidelines?

CONCEPTS **LEARNING AND EVALUATION EXPERIENCES**

Make an organizer accessory to maximize your personal space. Use items you already possess to make the organizer accessory. Examples: 1) Use shoe boxes covered with contact paper, fabric scraps, wallpaper scraps, or wrapping paper to store eight-track or cassette tapes. These boxes can be stacked on one another and placed on shelves. 2) Paint lumber scraps and add nails as pegs for hanging ties, jewelry, or belts. 3) Cover boxes with wrapping paper, fabric, etc., to make attractive storage boxes. 4) Decorate jars and cans to use for storing odds and ends. 5) Paint bricks and lumber to make versatile shelves. Share the completed organizer accessory with classmates. What other ideas can you think of to maximize your personal space?

Develop a plan to organize and rearrange an area that you consider personal space. [NOTE TO TEACHER: Students can make plans to organize and rearrange personal space such as a room, desk, shelf, drawer, locker, etc.] List the benefits you hope to gain from the reorganization. Benefits might include privacy, convenience, spaciousness, storage space, etc. Why should you organize and rearrange personal space from time to time? [NOTE TO TEACHER: Students can present reorganization plans for personal space to classmates, carry out the plan, live with the arrangement for a week, and present an evaluation of the reorganized personal space to the class. Students can evaluate how their new arrangement is working, if they are happy with the reorganization, and if further organization or rearrangement is needed, etc.]

b. Sharing space

Analyze the living space you use in a typical day. Starting with the time you wake up in the morning and ending at bedtime, keep a log of special places or items that indicate your living space. Determine whether the living space you use is personal or shared living space. How do you let others know that some areas are your personal space? Why is it important to learn to share space with others? What kind of living space do you consider the easiest to share? the hardest to share?

Discuss the situations that can arise when one person shares his or her space with another person, such as sharing a bedroom with a sibling. Using your own background experiences, participate in making a class list of the advantages and disadvantages of sharing personal space.

Divide into small groups. Each group is to arrange a room to be shared by two persons. The situation for sharing the room is to be determined by the group. Look at the furniture illustrated on the flannel board and, as a group, make a list of the furniture to be used in the room.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	[NOTE TO TEACHER: Make an outline of a bedroom on a flannel board. Make bedroom furniture to stick on the flannel board. Furniture should be in scale with the room outline. Print a graph paper scale drawing of the same room and several scaled furniture pieces for the students to work with. Examples: two twin beds, a double bed, two night tables, two desks, two chairs, a dresser, chest, bookcase wall units, shelves made from bricks and boards, folding screens, etc.] Using the room outline printed on graph paper, arrange furniture cutouts in a suitable bedroom arrangement. Present your group's room arrangement to the other groups. As part of the presentation, each group should describe the situation for the room arrangement, arrange the furniture on the flannel board according to the plan on the graph paper, and explain why the room arrangement was chosen for the situation.
c. Caring for space	List all activities involved in caring for personal space. Did you include emptying wastebaskets, changing the sheets, and straightening drawers? Compare your list with classmates' lists and add any items you may have forgotten. Put a "D" beside each daily care activity, a "W" beside weekly care activities, and an "S" beside seasonal care activities. Why is caring for your space important? What are some advantages of caring for your space regularly? How can being neat and orderly save you money? Work individually or in groups to prepare reports on activities that involve caring for your space. Topics: bed making, dish washing, laundry, etc. Present your report to the class along with a demonstration if applicable. Why are these activities necessary? Who should be responsible for each activity? Why? Prepare a time and work schedule for the daily care and cleaning to take place in your room. How would you change the schedule if you shared a bedroom? How does your decorating scheme and storage area affect the care of your room? How do you save time by keeping your space in good order? How does a clean room affect your mood? a messy room? Develop a plan to take over some of the house care activities at your home or in the home economics department. Would you prefer a permanently assigned care duty or a rotating schedule where you have different jobs each week? How does assuming responsibility for housework show maturity?

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
2. Tastes, preferences, interests and activities	View slides of various room decors. Discuss the type of person you think each room represents. What are the tastes, preferences, interests, and activities conveyed to you by each room's decor? How has the living space been personalized by the occupant(s)?
	Study the decor of rooms illustrated in textbooks, magazines, and catalogs to gain a better understanding of housing as an outlet for self-expression. Locate a picture of a room that best reflects your individuality and personality. Place the picture on the bulletin board with one hint written below the picture about an interest or activity you enjoy. Your class members will do the same. Match the pictures and hints with the names of class members. Compare answers.
	Describe how the individual influences housing. Select a house or apartment layout of the home of a popular public figure from a newspaper, magazine, or interior decorating book. The public figure might be a movie, T.V., or singing personality; athlete; author; designer; or politician. What tastes, preferences, interests, or activities are indicated in the layout? Share the home layout with the class to see if they have similar impressions of the person's interests, activities, etc. [NOTE TO TEACHER: Students can also view popular TV shows to evaluate how tastes, preferences, interests, and activities of various characters are depicted through the stage settings on the show.The same activity could be completed using drawings or pictures of a home in your community.]
	Compare your personal interests with the interests of an older or younger sibling or friend. List on a sheet of paper the differences and similarities. How have your interests changed over the past five years? How do you think your interests will change in the future? Discuss with your class how the decor of your personal space reflects your current interests and how you might change the decor to show new interests.
	Write a case study describing a person's tastes, preferences, interests, and activities. Exchange case studies with a classmate. Determine how the person in the case study can decorate his or her personal space to reflect the described situation. Share your ideas with class. [NOTE TO TEACHER: Students can work on the case studies individually or in small groups.]
	Use the worksheet on Teaching Aid 11 to identify how your tastes, interests, activities, and preferences can affect your room decor. How does your personal space at home reflect your personality? How could you change it to be a better reflection of you?

COMPETENCY: *Ability to apply the elements and principles of design to housing and home furnishings*

SUB-COMPETENCIES: *Relate design to housing and home furnishings.*

Identify the elements and principles of design.

Explain how to select good design.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
C. Design 1. Using design	Define the term *design*. How does design relate to housing? [NOTE TO TEACHER: Design is the arrangement of various components to create an artistic unit or the process of selecting and organizing forms and materials to suit a purpose.] Cite ways people express themselves through design. How are homes, automobiles, and clothing examples of ways people express themselves through design? Explain. Discuss ways in which well-known public or television figures express themselves through design. Complete the same exercise using people in your community as examples.
2. Determining design a. Introduction to elements of design	Read selected references to identify the elements of design. Name and define each element of design. Discuss each element. Illustrate the ways lines are used in a room to create various feelings. Draw vertical, horizontal, curved, and zigzag lines on a flip chart or the chalkboard. Identify feelings suggested by each. Examples: calmness, dignity, excitement, confusion, femininity, masculinity, action, repose, and movement. Describe ways in which lines suggesting these feelings are used in home furnishings and housing. How do you react to line direction or motion? Do all people react the same way? Explain. Construct a bulletin board from magazine pictures of rooms to emphasize that lines are a basic element of design. Use yarn to illustrate the basic lines of design in each picture. Which type of line predominates in the home economics classroom? What feelings are suggested by the room? Explain the statement "Form should define function." [NOTE TO TEACHER: Salt and pepper shakers can be used to clarify this statement. Show one pair of functional salt and pepper shakers made of clear glass. Show another pair made of an opaque material and shaped like unrelated objects, such as two cats. Explain that sometimes form is not logically related to function and that this can result in a poorly designed object.] Why is it important for form to relate to function? What other items can you think of that are well-designed, such as

clear salt and pepper shakers? Bring from home or find in the home economics room one item which is well-designed and another which has a poor design. Share your findings with classmates. Does everyone agree on what constitutes a well-designed object? Explain.

Define *two-dimensional* and *three-dimensional* designs as they relate to form. Find examples of two-dimensional and three-dimensional designs in magazines, newspapers, etc. Look for two-dimensional designs on rugs and walls. Three-dimensional designs are easily found in furniture. Why do designers use a combination of two-dimensional and three-dimensional forms? Explain how variations in form lead the eye and give direction.

Demonstrate people's need for space by putting all the students' desks in one small area in the home economics room. How does it feel to be in a crowded space? Do you feel cozy or trapped? How does it feel to be in a room with too much space such as in an empty church or auditorium? Do you feel threatened or do you enjoy the open space? Discuss space as it relates to housing. Do you prefer homes with an open feeling or homes with a cozy feeling? Share your opinions with classmates.

Listen to a panel of guest speakers talk about space as an element of design. [NOTE TO TEACHER: Possible panelists are an architect, an interior designer, a handicapped person, an elderly person, and a member of a family in the expanding stage of the life cycle.] Why is space important to each? How do their views differ?

Obtain a variety of fabric samples and identify different types of patterns (plaid, paisley, solid, floral, etc.). Which samples look good together? Does everyone agree on which patterns should be used together? Is there a right and wrong opinion? Explain. [NOTE TO TEACHER: Fabric samples may be obtained from students' parents, a fabric store, interior designer sample books, or leftover scraps from clothing classes.]

Blindfold a class member. Have the person feel the texture of various household objects and guess what the object is and what it is made of. Which objects were easiest for the person to guess? the most difficult? What other sense would have made identifying the objects easier? Can you easily recognize objects just by feeling the texture?

Complete a scramble puzzle to identify words frequently used to describe textures. [NOTE TO TEACHER: The puzzle is Teaching Aid 12. **ANSWERS** 1) soft, 2) fuzzy, 3) hard, 4) smooth, 5) rough, 6) shiny, 7) crisp, 8) silky.

CONCEPTS **LEARNING AND EVALUATION EXPERIENCES**

Completed sentence. Texture can be described by using the senses of *touch* and *sight*.]

Illustrate how texture adds variety and interest to fabrics, coverings, and furnishings. Collect various textured materials of the same color. Include samples that look shiny, rough, smooth, dull, firm, light, and heavy. Discuss how the projections of a rough surface tend to cast a shadow in certain light and make the color appear darker. Discuss how the same piece of furniture can look entirely different when upholstered in the same color in a damask, homespun, or chintz fabric. Are all textures compatible? Why?

Divide into small groups to prepare a bulletin board, poster, or other display on the principles of design. Select one of the following to illustrate: rhythm, emphasis, informal balance, formal balance, proportion, or harmony. Present to the class in an interesting way using pictures, flannel board, accessories, furniture, etc. Use fabric, wallpaper and carpet samples, magazine illustrations, sketches, or other picture designs. Remember to consider the principles of design in arranging the items on the bulletin board or poster. Follow up the presentation by discussing how individuals and families can express creativity through application of design principles.

Obtain a prism and hold it to the sunlight. Note the colors in the rainbow made by the prism. Compare the prism colors to the colors in a color wheel. Use Teaching Aid 13 to make your own color wheel. Refer to selected references for appropriate arrangement of colors. [NOTE TO TEACHER: Have students use map coloring pencils to make the color wheel.]

Use selected references to complete the color scheme work sheet. On the lines below the color wheels, give a short definition of each color scheme. [NOTE TO TEACHER: Teaching Aid 14 may be used as a work sheet or test. Answer key to this activity is Teaching Aid 15.]

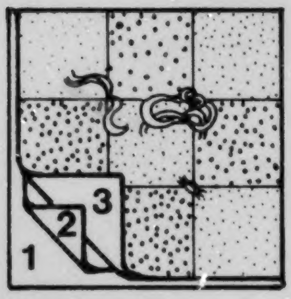
Brainstorm to list color symbolisms. Examples: red–danger; green–envy; yellow–cowardice; blue–sad. Do any colors have a particular association for you? Explain. For instance, a person you admire wears blue often, so you like the color because of that person. Do any colors have unpleasant associations for you? Explain.

View Teaching Aid 16 to see how color influences the apparent size and shape of items. Which room looks the

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

smallest? the largest? Refer to selected references to name the warm and cool colors. How can you use colors to your advantage in decorating? What happens when light hits dark colors? light colors?



1 - Lining
2 - Filler
3 - Patchwork

Design and stitch a nine patch quilt block to illustrate the elements of design. The quilt block can show line (horizontal, vertical, diagonal), pattern, texture, form (2- or 3- dimensions), and a color scheme. [NOTE TO TEACHER: Pattern for quilt block is Teaching Aid 17. Students can use scraps from clothing classes or bring fabric from home to make the quilt block. Quilts can be hand quilted, machine quilted, tufted, or tied. To tuft or tie a quilt, pull yarn, embroidery floss, or thread through the lining, batting, and patchwork side at the corners of each patch. Knot and clip the ends of the yarn, embroidery floss, or thread on the patchwork side. (See illustration.) A single quilt block can be used as a pillow top, wall hanging, or decoration on a shirt. Some students may wish to make a whole quilt at home. Class quilt blocks could be put together to form a quilt to be sold as an FHA/HERO fund raiser.] Present your quilt block to the class and explain each element of design as represented.

b. Introduction to principles of design

Read selected references on principles of design. Develop a class definition of each. How do elements of design relate to principles of design? Why are principles of design not considered rules?

View Teaching Aids 18-23 to analyze each principle of design. Name examples of formal and informal balance. How does proportion relate to scale? How is the element of pattern important to the principle of scale? How does line influence unity? What types of rhythm are present? What are some items which could be used as points of emphasis in a room? Why is emphasis important? Find an example of each principle of design in the home economics department or in a house.

3. Selecting good design

Read selected references on good design. Discuss how applying the elements and principles of design can result in good design.

Describe how good design is influenced by the elements and principles of design. View four illustrations of rooms. Explain how the basic elements and principles of design have been combined to create the total look of each room. [NOTE TO TEACHER: Select four different large pictures of rooms in which the elements and principles of design can be easily identified.] Discuss how good design shows an orderly arrangement of the materials used and results in a beautifully furnished room.

Analyze the meaning of good taste in design. What is good taste? Who decides on what is good taste? Prepare a written report on one of the following topics: 1) Good taste is not determined by cost, 2) Fashion in home furnishings is not a good criterion of design, 3) Taste in home furnishings is a sense of what is appropriate to your personality and life situation. Use information from textbooks and library materials for your report. Present your report to the class. Discuss the advantages of understanding good design.

Critique a room arrangement to show an understanding of good design. Select a room arrangement from a catalog or magazine which shows how the elements and principles of design have been used to create good design. List the factors that make the room arrangement a good design. Do others in the class agree that the room illustrates good design?

COMPETENCY: *Ability to conserve energy and water in the home*

SUB-COMPETENCIES: *Define energy and water conservation.*

Give examples of ways to conserve energy and water in the home.

Demonstrate ability to conserve water at home.

CONCEPTS

D. Energy and Water Conservation in the Home

LEARNING AND EVALUATION EXPERIENCES

Read selected references on energy and water conservation. Define *energy* and *water conservation* in your own words. Compare definitions with classmates and formulate a class definition. Where have you heard of energy conservation before? Why is it important to conserve energy? Is water shortage a problem in your area? What is the main water supply source in your community? Can one person's conservation measures really make a difference? Explain.

Write names of electrical appliances on Teaching Aid 24. Then put an "X" across three items you could do without and put circles around three items you consider most important. Discuss as a class things you could do to save energy with each item listed. Example: television set–turn off when not watching; play outside or read a book instead.

Make a fabric roll draft shield to use as an inexpensive way to reduce heat loss through windows and doors. [NOTE TO TEACHER: To make a fabric roll draft shield, cut a strip of fabric a little longer than the width of the window or door where it is to be used. The width of the fabric should be twice the width of the roll desired plus seam allowances. Fold the fabric lengthwise with wrong sides out. Sew the long sides together. Sew one short end together and leave the other short end open. Turn the fabric inside out. Stuff with polyester, cotton, kitty litter, or birdseed. Sew the open end together by hand. This fabric roll draft shield can be used plain or can be decorated to resemble dogs (particularly dachshunds), snakes, alligators, etc. Felt, yarn, and buttons can be used for faces, ears, and feet on the draft shields.] Place the shield on the window sill or on the floor next to a closed door. As an FHA/HERO project, the fabric roll draft shields could be donated to senior citizens who live in older homes in your community.

Listen to a representative of the local water department speak about energy conservation, or take a tour of the water department. Make a list of questions to ask the water department representative(s). Examples: How many gallons of water are consumed in a home on an average day? Do you use more water if you wash dishes by hand or in a dishwasher? How do you know how much water is used by your family each month? How much does water cost?

Brainstorm to list energy and water conservation tips. [NOTE TO TEACHER: Expect tips such as turn off TV when not watching, open refrigerator only when removing or replacing food, wear warmer clothes during cold weather, close door quickly when going outside, turn off lights when leaving room, take short showers or shallow baths, turn faucet completely off after washing hands, keep cold water in the refrigerator to prevent running tap water until cold, wash only full loads of clothes and dishes, turn off water while brushing teeth, etc.] Choose one conservation tip and make a mini-poster illustrating the tip. Hang poster in a prominent place in your home to remind friends, family, and yourself to conserve energy in the home.

Apply water and energy conservation tips for one week. At the end of the week, fill out check list to see your strong and weak points in conserving resources. Share with the class how you can further improve your energy conservation skills. [NOTE TO TEACHER: Teaching Aid 25 is the energy saving checklist.]

COMPETENCY: *Ability to analyze career and job opportunities related to the fields of housing, home furnishings, and equipment*

SUB-COMPETENCIES:

Analyze career ladders in the fields of housing, home furnishings, and equipment.

Analyze personal qualities which affect employability.

Determine educational preparation necessary for employment in housing, home furnishings, and equipment jobs.

Analyze the employment outlook for jobs in the fields of housing, home furnishings, and equipment.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
E. Exploring Careers in Housing Home Furnishings, and Equipment 1. Career ladders	Listen to a home economist or school counselor explain career ladders for housing, home furnishings, and equipment careers. What opportunities are available? Were you aware of these opportunities? Review the *Dictionary of Occupational Titles* to identify tasks performed by employees in careers related to housing, home furnishings, and equipment. What skills can you gain in vocational home economics education classes which would be needed in these jobs? What other courses would be helpful? Look through the classified section in your local newspaper for jobs related to the housing, home furnishings, and equipment fields. Select one listing that might be of interest to you. Share the listing with class.
2. Qualities needed	Brainstorm to list characteristics and qualities needed by people who work in the fields of housing, home furnishings, and equipment. Explain why you think one quality is important. Are some qualities more important than others? Write a letter of application for a housing, home furnishings, or equipment job. Describe the qualities that you possess that would make you a successful employee in this field. [NOTE TO TEACHER: Students could write letters of application for the job opportunities they found in the classified section of the newspaper.] View a film or filmstrip related to the qualities needed for specific housing, home furnishings, or equipment careers. Which qualities are needed for most jobs in these areas?
3. Educational requirements	Research the *Occupational Outlook Handbook* or school library to discover the educational requirements for the job you selected from the classified section of the news-

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	paper. Explain to class the educational requirements needed for the job. Interview a person employed in the housing, home furnishings, or equipment field. What personal qualities and educational requirements are needed for that person's job? Obtain information on job skills needed, training required, salary, employee benefits, and opportunities for advancement. Share your findings with class. What changes would you need to make in yourself to qualify for this career?
4. Employment outlook	Listen to a school counselor or other resource person discuss present and future job needs in the fields of housing, home furnishings, and equipment. What is the job outlook for the next five years? Discuss local possibilities for employment. Discuss ways to find out about these jobs. View a film or filmstrip about the future of housing and home furnishings. What new job opportunities may open up with new trends in housing? What is one career you would be especially interested in? Why?

HOMEMAKING I

HOUSING, HOME FURNISHINGS, AND EQUIPMENT
HOMEMAKING I

COMPETENCY: *Ability to analyze the interrelatedness of the various factors affecting housing and the individual*

SUB-COMPETENCIES: *Describe the influence of housing and home furnishings on the family.*

Describe psychological influences of housing and home furnishings on individuals.

Specify social influences of housing and home furnishings on individuals.

Point out how housing and home furnishings can promote intellectual development of an individual.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
A. Influences of Housing on the Family 1. Physical well-being	Define *environment*. Define *physical well-being*. List and and give examples of environmental characteristics that affect physical well-being. Play "Housing Password." To play the game, match the terms describing environmental characteristics which affect physical well-being to their synonyms. [NOTE TO TEACHER: Develop "Housing Password" using the same format as used for the television game show "Password." Some environmental characteristics that affect physical well-being are safety, temperature, humidity, lighting, noise, odors, fumes, and order.] Describe ways environmental characteristics affect the physical well-being of an individual. Discuss your reactions to changes in the environment within a room. Describe your reaction to: smells such as room deodorants; open windows that cause excessive noise; poor lighting; excessive noise cause by equipment; temperature that is too hot or too cold; overcrowded space or excessive space in a room; and a constantly ringing telephone. Discuss the effects of these changes on the physical well-being of other individuals in the room. Give examples of ways various environmental characteristics may be controlled to provide a healthful physical environment. Examples of environmental controls include: air conditioners; heating systems; humidifiers; artificial lighting; fans; window treatments; and opening and closing of windows, doors, drapes, or blinds. Divide into small groups to analyze the physcial environment of the home economics department. Conduct a survey of the home economics department using the National Safety Council Survey form. Compare your findings

with those of the other groups. Discuss ways to better control the physical environment of the home economics department. [NOTE TO TEACHER: National Safety Council Survey forms may be obtained from your fire department.]

2. Psychological well-being

Identify housing characteristics that affect psychological well-being. Define *psychological well-being* and *perception*. How are psychological well-being and perception related? List on the chalkboard housing characteristics that affect psychological well-being, such as safety, elements and principles of design, amount and arrangement of space, noise, temperature, humidity, air circulation, and order.

Illustrate ways housing conditions affect psychological well-being. Do housing conditions affect all persons the same way? Why? What role does perception play in the way housing conditions affect you psychologically? Role play individuals who "see" or perceive the same house in different ways.

Analyze a specific housing situation to determine the physical and psychological effects it may have on its occupants. To do this, participate in a field trip of the housing located in the vicinity of your school. Determine the possible physical and psychological effects on occupants of the various types of housing seen. Discuss how the various houses make you feel. Include both pleasant and unpleasant feelings. Which type of housing makes you feel safe and protected from the unknown? makes you feel unsafe and not protected? fulfills your need for privacy? gives freedom for family members to develop their interests and do the things they enjoy doing? What characteristics of housing contribute to your feelings? How does housing with warm knotty pine, plush carpeting, and bright upholstery fabrics affect you? Would you prefer a rustic setting with old but sturdy furnishings, reused lumber from old barns, and objects collected over the years? Why? [NOTE TO TEACHER: Different types of housing such as single family dwellings, apartments, duplexes, town houses, mobile homes, etc., should be included in the field trip. Students could also visit model homes in newly constructed housing developments.]

3. Social well-being

Name the ways that housing influences social behavior. On a piece of paper, list three or four of your favorite social activities in which you participate at home. Name housing characteristics that allow the performance of each activity. Discuss social activities that may be limited by specific housing conditions. Make a class list of the ways housing may influence social behavior.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Explain the influence of housing on social behavior. Divide into groups to role play situations showing how housing conditions and facilities affect social activities and behavior. Use situations such as overcrowding at a party, moving outside activities inside because of weather, visiting with friends and listening to music when family members are trying to sleep, etc. Discuss possible solutions for the situations presented.
	Point out ways housing influences social behavior. Analyze social behavior in relation to housing in a given situation such as two siblings sharing a room, one sibling entertaining friends at the same time parents are entertaining a guest, etc. Discuss ways that furnishings and space of a home can be reorganized to improve social interaction among family members and friends. [NOTE TO TEACHER: You might want students to view a filmstrip to summarize the social influences of housing.]
	Plan how the space within a home can be used to fulfill the needs for social interaction and conversation between people, both family members and guests. Work in small groups and prepare a presentation to show how a specific room or space can be used or designed to encourage social interaction. Topics for the presentation might include one of the following: eating area, living room, den, game room, family room, patio, back yard, garage or carport. Discuss inexpensive ways of stretching space within a home to encourage social interaction.
4. Emotional well-being	Define *emotions.* List ways housing may influence your feelings, thoughts, and actions. Discuss how the furniture arrangement, the color, and the physical characteristics of a home affect your emotions.
	View pictures of rooms provided by your teacher and characterize their "personalities" as suggested by each room's appearance. Describe how each room makes you feel. Share your feelings with the class. Analyze the descriptions to determine the emotional effects on occupants of various rooms.
	Determine how the feeling, thinking, and actions of an individual may be affected by housing. Take turns naming a song title with a reference to home by using the sentence, "The song____(song title)_____reminds me of home because . . . ." Class members will complete the sentence by writing a one-word or short phrase description expressing their emotions. Song titles might include: *Green, Green Grass of Home; Doggie in the Window; This Old House; Home on the Range; Back Home Again,* etc. After each class member has had

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	a chance to name a song title, discuss the various emotions evoked by the song titles.
5. Intellectual development	Identify ways housing can promote intellectual development. Define *intellectual development.* Consider the intellectual development role of each of the following teaching aids: artwork, books, desk, toys, television, games, musical instruments, hobbies, etc. Give examples of ways housing can promote intellectual development. Describe conditions in your school or public library which are not conducive to study. How could these conditions be changed? What changes are needed in the building or physical facilities? Discuss housing characteristics that can promote intellectual development. Write a case study that involves a situation where intellectual development is hindered in the home. Exchange case studies with classmates. Read aloud the case study and give a solution for the situation. Discuss solutions given for each case study.
6. Economic factors	Identify the ways finances are affected by housing. Discuss factors contributing to total housing costs, such as house or rent payment, insurance, taxes, utilities, maintenance, equipment, and supplies. Discuss how housing influences a family's economy and how a family's economy influences its housing. How does this affect the individual? Give examples of economic changes that affect housing. Examples might include increase or decrease in income, inheritance, depression, wage freeze, fluctuating interest rates, etc. Discuss economic conditions of the past two years that have influenced housing. Interview a home builder, a real estate person, a person employed in a bank or money lending institution, or other persons in the community to gain a better understanding of the influences of economic change on housing. Share your findings with the class. View Teaching Aid 26 to summarize the influences of housing on the individual. Analyze the interrelatedness of the various factors which affect housing and the individual.

COMPETENCY: *Ability to analyze the significance of the elements and principles of design in housing and home furnishings*

SUB-COMPETENCIES: *Apply the elements and principles of design to housing.*

Create space arrangements which incorporate design principles.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
B. Home Interior 1. Design basics a. Styles of design	Read selected references to define terms used in design. Define the following terms: *design, structural design, decorative design, naturalistic or realistic design, conventional or stylistic design, abstract design, geometric design,* and *design honesty.* Compare your definitions with those of class. How does design relate to housing? Can design be both structural and decorative? Explain. [NOTE TO TEACHER: Teaching Aids 27-28 illustrate the styles of design.]

Review the definitions for terminology used in design by completing a work sheet. [NOTE TO TEACHER: The following statements can be duplicated for a work sheet. The words underlined are the answers and should be omitted when preparing the work sheet for students. 1) *Structural design* is primarily functional and is the basic form created by the size, shape, color, and texture of an object. 2) *Naturalistic or realistic design* represents subjects just as they are found in nature. 3) *Abstract design* is an imaginative, impressionistic form of representation. 4) *Design honesty* is an accurate representation of materials, reflects the qualities of the materials used, and does not try to imitate other materials. 5) *Decorative design* is primarily aesthetic and has the design added to the structural shape and to the surface of the object. 6) *Conventional or stylistic design* is inspired by natural forms, but the forms are not accurately represented by the design. 7) *Geometric design* is an abstract design with mathematical shapes such as circles, triangles, and rectangles. 8) *Design* refers to the organization or arrangement of parts or details to create a complete and artistic unit which is pleasing to the eye. This work sheet could be used as a pretest.]

Find illustrations of decorative design used in housing. Explain ways structural design affects function and beauty. Discuss how structural design affects the function and beauty of the following objects: pitchers, cups, glasses, vases, lamps, and furniture.

Select an object illustrating decorative design. Explain how the decorative design affects the object's beauty and function. Give examples to illustrate that decorative design may enhance or interfere with function.

CONCEPTS | **LEARNING AND EVALUTION EXPERIENCES**

Relate design to housing. Discover examples of structural and decorative design depicted in housing illustrations. How does the decorative design enhance or detract from the structural design of the housing? In what ways may the decorative design be functional?

Look through fabric or wallpaper sample books and select samples with designs which represent the styles of design. Explain to classmates why the sample represents either naturalistic (or realistic), conventional (or stylistic), abstract, or geometric style of design.

Select a simple natural object such as a pecan, an apple, or an orange. Draw the object three times: once in a naturalistic (or realistic) design, once in a conventional (or stylistic) design, and once in an abstract or geometric style of design. Compare the differences in the drawings. Discuss the differences in the styles of design with classmates.

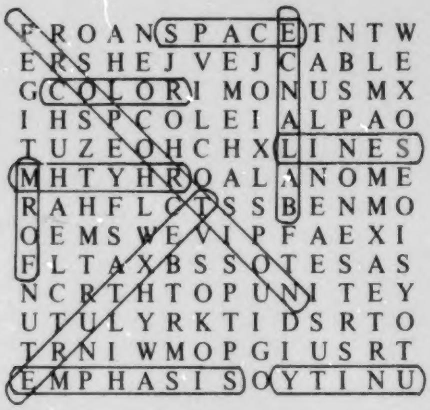
b. Elements of design
c. Principles of design

Determine your understanding of the design elements and principles by taking a pretest. [NOTE TO TEACHER: Teaching Aids 29-41 can be used for a pretest. Answers are: TA-29, space; TA-30, form; TA-31, 1) line, 2) vertical lines, 3) horizontal lines, 4) diagonal lines, 5) curved lines; TA-32, texture; TA-33, 1) red, yellow, blue, 2) orange, green, violet, 3) red-violet, red-orange, yellow-green, yellow-orange, blue-violet, blue-green, 4) white, 5) black; TA-34, proportion; TA-35, balance; TA-36, bisymmetrical balance; TA-37, asymmetrical balance; TA-38, radial balance; TA-39, 1) rhythm, 2) radiation, 3) opposition, 4) repetition, 5) gradation, 6) transition; TA-40, emphasis; TA-41, harmony (or unity).]

Read selected references to identify the elements and principles of design. Name and define terms related to the elements of design: *space, line, form, mass, texture,* and *color.* Discuss how color is the first thing others notice about a house or room. Name the four types of lines and discuss the visual effects of each. Why should the form of an object fit its function? How does texture affect the sense of touch and the sense of sight?

Name and define terms related to the principles of design: *proportion, formal balance* and *informal balance, unity* and *continuity, emphasis, scale,* and *rhythm.* Discuss the difference in formal and informal balance. How would you describe a room that has good proportion? Why are fireplaces and art pieces considered points of emphasis? Name the types of rhythm and discuss how each works. [NOTE TO TEACHER: Teaching Aids 18-23 illustrate and define the principles of design.]

Identify the terms associated with the elements and principles of design by completing a seek-and-find puzzle. The terms in the puzzle are spelled horizontally, vertically, diagonally, or backwards. To check your puzzle answers, take turns reading and defining each circled term. [NOTE TO TEACHER: Teaching Aid 42 is a seek-and-find puzzle. The answers are circled on the puzzle illustrated below.]



F R O A N S P A C E T N T W
E R S H E J V E J C A B L E
G C O L O R I M O N U S M X
I H S P C O L E I A L P A O
T U Z E O H C H X L I N E S
M H T Y H R O A L A N O M E
R A H F L C T S S B E N M O
O E M S W E V I P F A E X I
F L T A X B S S O T E S A S
N C R T H T O P U N I T E Y
U T U L Y R K T I D S R T O
T R N I W M O P G I U S R T
E M P H A S I S O Y T I N U

Watch a demonstration on the use of the elements of design. [NOTE TO TEACHER: A flower can be used to demonstrate how nature uses the elements of design. For example: lines of the flower give direction and movement (curved, graceful); form of the flower distinguishes, gives shape and identity (a specific flower–daisy, rose, or iris); texture of the flower tells how the surface structure looks and feels (smooth or rough leaves; velvet or coarse petals; smooth, tough or thorny stems); color of the flower adds focus and affects the attractiveness and characteristics of the flower (for example, you would not expect red daffodils).] Discuss how the elements of design complement each other to make the flower. Relate the elements of design to other objects and to furnishings in the room. Discuss the design elements used in a chair. Point out some objects in which the design elements are not coordinated.

Illustrate the ways lines are used in a room to create various feelings. Draw vertical, horizontal, curved, and zigzag lines on a flip chart or on the chalkboard. Identify feelings suggested by each. Examples: calmness, dignity, excitement, confusion, femininity, masculinity, action, repose, and movement. Describe ways in which these kinds of lines are used in home furnishings and housing. How do you react to line direction or motion? Do all people react the same way? Explain.

Watch a demonstration to gain a better understanding of color. Name and discuss the primary, secondary, and tertiary colors. Define *hue, intensity, value, tint, shade,* and *strength* as they relate to color. What is the result of adding white to a pure color? adding black to a pure color? [NOTE TO TEACHER: To explain primary, secondary, and tertiary colors, fill a clear Pyrex dish with water and place it on an overhead projector. Color the water with food coloring making secondary and tertiary colors from the primary colors. The colors on the color wheel can be illustrated by holding a prism to the sunlight. Students could compare the colors in the rainbow made by the prism to the colors on a color wheel.]

View Teaching Aids 43-44 to identify the types of color schemes. Discuss what is meant by a related color scheme. Define *monochromatic color scheme* and *analogous color scheme*. Give examples of each. What are the names of the contrasting color schemes? Describe each of the contrasting color schemes.

Read selected references to learn about form as an element of design. Define *form*. Why should form fit the function planned for it? [NOTE TO TEACHER: Explain that sometimes form is not logically related to function and that this can result in a poorly designed object.] Give examples of objects that illustrate good form. Give examples of poor design in regard to form. Why is form often called shape? Is form the same as or different from space? Explain. Discuss the forms which are most often used in furniture. Define *two-dimensional* and *three-dimensional* designs as they relate to form. Find examples of two-dimensional and three-dimensional designs in the home economics department. Explain how variations lead the eye and give direction. Discuss how related forms should be harmonious.

Illustrate how texture adds variety and interest to fabrics, coverings, and furnishings. Collect various textured samples of the same color. Include samples that look shiny, rough, smooth, dull, firm, light, and heavy. Discuss how the projections of a rough surface tend to cast a shadow in certain light and make the color appear darker. Discuss how the same piece of furniture can look entirely different when upholstered in the same color damask, homespun, or chintz fabric. Are all textures compatible? Why?

Prepare a bulletin board, poster, or other display on the principles of design. Select one of the following to illustrate: rhythm, emphasis, informal balance, formal balance, proportion, or harmony. Present your illustration to the class in an interesting way using pictures, flannel board, accessories, furniture, etc. Use fabric, wallpaper and carpet samples; magazine illustrations; sketches; or any other picture designs. Remember to consider the principles of design in arranging the items on the bulletin board or poster or in the display. After the presentations, discuss how individuals and families can express creativity through application of design principles.

Point out the use of the elements and principles of design in room decoration. Find a picture of a room which appeals to you. Relate each element and principle of design to the room. Write a paper showing ways the elements and principles of design are used in the room.

2. Application of design basics

Read selected references to identify the role of furnishings in a room. Discuss the use of design principles in the basic design of furnishings. How can the principles of design provide guidance in selecting home furnishings? Discuss the possibility of furnishings being outgrown or outmoded. Is this necessarily a problem? Why?

Participate in an inner and outer circle discussion to discuss one of the following statements: "The application of design principles to the selection of room furnishings can increase the satisfaction derived from their use" or "You can't have a nicely furnished room unless you follow the principles of design." [NOTE TO TEACHER: The inner and outer circle discussion is conducted by dividing the class into two groups and arranging them in circles. The inner circle is surrounded by the outer circle. Give students the statement to be discussed. The inner circle discusses the question for four minutes while the outer circle listens. Groups change places and the second group discusses the statement, commenting upon remarks made by the first group. If needed, the first group can return to the inner circle and rebut any comments made by the second group.]

a. Accessories

Brainstorm to identify categories of items that may be used as accessories, such as pictures, wall hangings, lamps, individual collections, vases, plants, etc. Discuss how accessories add the finishing touches that make a home attractive and personal. Identify and discuss current fashions and fads in home accessories.

Give examples of items that are used as accessories. Bring to class accessory items or pictures of accessory items. Describe the structural and decorative design of each. Discuss ways each item may be used.

Explain the ways design principles may be applied to the selection and use of accessories. Visit a furniture showroom and observe model rooms decorated in various styles. Select one model room that appeals to you and examine it closely. What major theme is expressed by the room decor? How do the accessories influence the theme of the room? How have the elements and principles of design been utilized in the room? How was color used in the room? Were bold, bright colors used? If so, where? Discuss the importance of choosing colors you will feel comfortable with for an extended period of time. Discuss the importance of choosing objects that can be redecorated or that do not represent permanent or large investments. Which principles of design were followed in grouping various sized pictures on the wall or in combining decorative objects? Give an example of emphasis found in the use of accessories in the room. [NOTE TO TEACHER: If a visit to a furniture showroom is not possible, pictures of rooms from magazines, catalogs, and furniture and decorating publications can be used.]

Use the elements and principles of design to make a home accessory which involves little or no cost. Examples: pencil holders made from empty cans; wastebaskets made from commercial ice cream cartons; decorative pillows; quilts (one or two quilt blocks of the planned quilt); draperies, table skirts, bed ruffles, or pillow shams made from sheets; room dividers from fabric, strings of colored beads, etc.; bedspreads made by quilting sheets; and bookshelves from bricks and boards; etc. Show classmates the completed accessory. If it is not possible to bring the accessory to class, a photograph of the accessory can be used. Point out the elements and principles of design used in planning and making the accessory. Evaluate the use of the accessory as functional or decorative. [NOTE TO TEACHER: This activity could be used with FHA/HERO encounter activities.]

b. Furniture arrangement

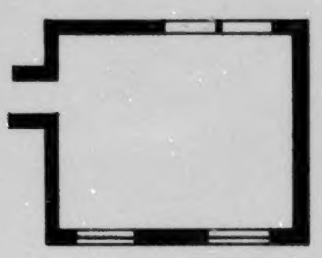
Read selected references to identify guidelines for furniture arrangement. Discuss how design and function are considerations in arranging furniture. Why should furnishings which are used together be placed together? Discuss the importance of keeping traffic lanes open between doorways, arranging a room so it is easy to clean and safe to live in, having some of the heavy furniture on each side of a room, putting large pieces parallel to walls,

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	etc. Is it important that furniture be arranged so windows are easily accessible for opening and closing? Why? View Teaching Aid 45 to learn how design and function are considerations in arranging furniture. Notice that both rooms illustrated on the teaching aid contain the same furniture, but the furniture is arranged differently. Which room has an open space arrangement? Which room has a conversation and study arrangement? Which room arrangement would you feel most comfortable in if you were going to study? if you were going to invite friends over to watch television? if you wanted to relax and read a book? For each situation, explain why you chose the particular room arrangement. Discuss the elements and principles of design used in the room arrangements. Analyze arrangement of furniture in the room on Teaching Aid 46. Determine the effectiveness of the furniture arrangement in the room. Have the elements and principles of design been used in the furniture arrangement? Is the furniture arranged for conversation? Are the traffic lanes open between doorways? Are windows easily accessible for opening and closing? Are the large pieces of furniture placed to balance each other? Are tables convenient to use? Is the room convenient? attractive? Using the teaching aid as a guide, draw a sketch of the room. Draw and arrange the furniture using the elements and principles of design. You may add additional furniture to the room. Share the furniture arrangement with the class. Point out how you used the elements and principles of design when planning the furniture arrangement. [NOTE TO TEACHER: Teaching Aid 47 illustrates one possible room arrangement using the elements and principles of design.]
3. Arranging space	Visit modestly priced model homes, apartments, or mobile homes. Point out ways in which they have been decorated and furnished to appear larger. Note use of small-scaled furniture; mirrors; sheer window coverings; a single cool, light color throughout; the same or very similar floor covering in all rooms; and woodwork and baseboards the same color as walls. Discuss how the elements and principles of design have been used. [NOTE TO TEACHER: Students might develop a class list to use when observing the space arrangement of model homes, apartments, or mobile homes.] Propose furniture arrangements in a specific situation. Prepare an illustrated report to present to the class. Select one of the following rooms for your report:

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

1) your bedroom at home, 2) classroom, 3) a bedroom—such as the illustration shown below—measuring 10" x 12"



with door opening to the hall, closet with a double sliding door, and two windows on one wall, 4) a specific room in your home. Measure the room and any furniture already in the room. Use ¼-inch scale graph paper and furniture templates to show the room on paper as it is; then design a new arrangement of the furnishings, adding or discarding pieces as necessary. Point out the elements and principles of design used in the room arrangement. Present your report to the class. Let classmates compare the two room arrangements.

Describe in an essay how a family's activities influence the use of space and the arrangement of furnishings. Consider space arrangements for regular family activities such as receiving and entertaining visitors; hobbies and family recreation; studying and reading; rest and sleeping; preparing, serving, and eating meals; cleaning dishes and utensils; laundering; bathing and dressing. Discuss the importance of individual privacy and suggest ways family members can achieve privacy through the use of space and the arrangement of furnishings. Share your essay with classmates.

Demonstrate the use of design principles in arranging for entertainment and leisure time activities. Use a scaled floor plan of the space available either in your family room, den, or living room or in the living room of the home economics department. Use furniture templates to represent the furnishings in the room. Arrange furnishings to suit the entertainment and leisure-time activities of your family. Analyze the room arrangement for satisfaction of entertainment and leisure-time activities. Discuss how the room is efficient and effective in meeting family needs. Evaluate the room arrangement and determine inexpensive ways to make more efficient use of the space available as the interests of family members change.

COMPETENCY: *Ability to relate the role of creativity to housing and home furnishings*

SUB-COMPETENCIES: *Define creativity.*

Summarize the influence of creativity in room arrangements.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
C. Role of Creativity	Define creativity by brainstorming to name different forms of creativity. Discuss how creativity in room arrangements expresses the personality of the occupants. Does creativity mean having new or original ideas? Explain. Discuss one example of your creativeness with classmates. Explain what your creativeness means to you. Give examples of creativity expressed in room arrangements. Select pictures of creative room arrangements. Describe the creative aspects of each room. Does the room arrangement give a clue to the personality and interests of the person or persons who live there? Listen to a panel or a guest speaker discuss the role of creativity in the home. [NOTE TO TEACHER: Artists, florists, or persons who weave rugs, work with pottery or ceramics, make wall hangings, or do needlework could be invited to discuss creativity in the home. They could also demonstrate or exhibit their creative work.]

COMPETENCY: *Ability to assess the significance of resource conservation in the home*

SUB-COMPETENCIES: *Identify present energy and water sources.*

Determine possible energy and water sources for the future.

Determine methods of energy and water conservation used in the home.

CONCEPTS

D. Conserving Resources
  1. Resources
    a. Energy

LEARNING AND EVALUATION EXPERIENCES

Identify energy resources most commonly used today. Conduct a survey of all the houses on your block or around the school to find out the types of fuel or fuels used to power each house. Share your findings with classmates. Make a class list of all fuels used as energy sources for housing in your community. Discuss why certain fuels are used more than others in your community.

Determine the fuels used to create the energy used in your home by participating in a field trip to the various sources of power in the community. Prepare questions to ask on the tour such as: How much fuel does the average family use in a month? What is the average cost of a monthly fuel bill? What plans are being made for creating future fuel for consumer consumption? [NOTE TO TEACHER: If a field trip is not possible, a panel of persons from the various energy sources could be used to inform students about energy and to answer questions students may have about energy.]

Summarize possible energy sources for the future. Bring a news article to class concerning future energy sources for housing. Articles can be found in newspapers; housing, business, and conservation magazines; books; and housing newsletters. Share the news article with the class. Discuss the possible energy sources for the future in your community. What is the greatest energy problem facing your community?

Compare potential sources of fuel or energy. Divide into small groups and use materials from the library to prepare a report on a potential source of fuel or energy. Present the report to classmates. Determine the most practical potential energy source for your community.

Predict an energy source for homes in the future. Write a science fiction short story about living in a house in the future. Describe the energy source you would use to power your home. List factors which helped you select the energy source. Share the story with classmates.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
b. Water	Identify present water sources. Listen to a guest speaker from the city water district discuss the city water supply. Prepare questions in advance to ask the speaker such as: From what source does the city receive its water? How many gallons of water does the city use daily? yearly? Where is the water stored? How long will the current supply of water last the city? Is there danger of a water shortage? What possible future alternatives does the city have for receiving water? What is the greatest problem facing the city in regard to the current water source?
2. Conservation	Read selected articles and references to gain a better understanding of conserving energy and water in the home. List ways to conserve energy and water in the home. Share the list with classmates. Examples of conservation measures for the home include: washing only full loads of clothes and dishes; lowering water level in toilet by placing a brick or plastic containers in holding tank; turning water off while brushing teeth or applying soap, turning water on again to rinse; doing laundry and dishes in the early morning or late evening to avoid peak hours of hot water use; turning off faucets completely to avoid drips; turning off lights, TV, stereo, and radio when not in use; lowering thermostat in the winter and raising it a few degrees in the summer; opening refrigerator and freezer doors less often, and closing doors quickly; keeping windows and doors tightly closed; and removing some of the light bulbs from fixtures with more than two bulbs.
	Illustrate the conservation of energy and water in the home. Divide into small groups. Select one wasteful home energy or water usage practice. Design a poster emphasing conservation techniques to correct this wasteful practice. The groups' posters can be placed on bulletin boards within the home economics department, school hallways, or teacher and student lounges. Examples of wasted energy and water include: leaving TV, stereo, or radio turned on when not in use; holding refrigerator door open for extended period of time while deciding what to take out; letting water run continuously when brushing teeth or washing dishes; allowing a faucet to drip (approximately 90 drops of water per minute wastes 1000 gallons of water per year); washing one garment in a washing machine (requires the same amount of energy as washing a full load); bathing when quick showering uses about half as much water; toasting bread in an oven (consumes about three times more energy than toasting bread in an automatic toaster); etc. Titles that could be used to introduce the poster ideas include: "Are You An Energy Hog?", "Conserve Our Resources By Being A Natural Resource," or "Resources—Can You Af-

ford to Waste Them?" Discuss the ideas illustrated on the posters before they are displayed.

Point out methods to conserve energy and water usage in the home. Divide into small groups and role play situations that frequently occur in your home that waste energy or water. Discuss possible alternatives for the situations.

COMPETENCY: *Ability to manage a home*

SUB-COMPETENCIES: *Explain the importance of routine care of the home.*

Demonstrate the relationship of time, energy, skill, and techniques in simplifying home care tasks.

Analyze the effects of fatigue and rest on the performance of housekeeping tasks.

Summarize information relating to home accidents and their prevention.

CONCEPTS

E. Developing Skills in Management of the Home
   1. Organization of tasks

LEARNING AND EVALUATION EXPERIENCES

Brainstorm to cite reasons for routine care of the home according to the following categories: physical, psychological, economical, and social well-being. Discuss how routine care saves wear on the home and its furnishings and increases the safety of the home. Explain the importance of routine care. Give examples to illustrate the possible effects on physical, psychological, economical, and social aspects of housing if routine care is neglected.

Work in small groups to identify categories of routine care in the home. Make a list of household areas in which routine care is advantageous. Examples: windows, storage, yard, floor coverings, furniture, appliances, and bathroom fixtures. Describe the routine care needed by each household area. Share information with other groups. [NOTE TO TEACHER: Students might work individually and make a list of housekeeping tasks they routinely perform at home.]

Read selected references to identify factors involved in managing housekeeping responsibilities. Discuss how a knowledge of factors that affect difficulty of housekeeping tasks can aid in the simplification of the tasks. Define the following words as they relate to managing housekeeping tasks: *plan, control, organize, evaluate, fatigue, rest,* and *dovetailing*. Compare your definitions with classmates.

Describe specific information needed for planning a housekeeping task. Answer the following questions explaining a specific household task: Why (reason for task)? Who (worker)? What (task)? When (time, frequency)? Where (location)? How (tools, supplies, procedures)? Share your ideas with the class. Why is it important to plan tasks? Discuss how two or more household tasks may be dovetailed. Why is dovetailing important in planning tasks? Discuss the relationship between organization and planning. Discuss how evaluation of past performance is related to control over future tasks. How may evaluation lead to conscious change of methods or steps to simplify a job? How may evaluation lead to conscious control of work methods so that routine is developed? In what ways is routine the result of skill? In what ways may routine be a resource?

Work individually or in small groups to show how tasks may be simplified by eliminating or combining steps. Select a specific task and plan a demonstration for the class. Examples of tasks: vacuuming the floor in an orderly sequence; using both hands to dust or wash windows. Also include information on how the tasks may be simplified by changing equipment or supplies. Examples: using self-polishing wax rather than paste wax; using a wide broom instead of a narrow broom for outdoor sweeping of sidewalks and patios. Also explain how the task may be simplified by changing the arrangement of a work area. Example: a cart beside a counter for use in getting or putting away utensils and supplies.

Analyze the effect fatigue and rest have on the difficulty of housekeeping tasks. Perform assigned tasks related to housekeeping in the classroom within an allotted time span. After completing the tasks, describe your feelings. Are your feelings more physical or more mental? Why? Discuss the following questions after a brief period of rest and light refreshment: What effects do fatigue and rest have on the difficulty of performing household tasks? How may planned rest periods or alternating difficult and easy tasks help reduce fatigue? How may mental fatigue be reduced?

2. Safety

Listen to a resource person summarize information relating to home accidents and their prevention. What are the common safety hazards in the home? Discuss the cause and prevention of each safety hazard in the home. Explain how an awareness of the factors affecting safety in home maintenance can decrease accidents. [NOTE TO TEACHER: Students can collect newspaper clippings related to home accidents to share with classmates.]

Make a class list of safe ways to use supplies and equipment. Examples: read directions for storage and use; label and identify household chemicals; and put medicines and poisons out of reach of children. Include a list of emergency telephone numbers such as police, fire department, family doctor, ambulance, emergency medical center, Poison Control Center, and family friend. Make the list available to parents, teachers, and/or other persons in the community, leaving blank spaces for telephone numbers of family doctors and family friends.

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

Propose ways one can be prepared in case an accident occurs. Select common accidents that occur in the home. Plan your course of action if such emergencies should occur. Share plan with classmates.

COMPETENCY: *Ability to analyze career and job opportunities related to housing, home furnishings, and equipment*

SUB-COMPETENCIES: *Identify entry-level jobs related to housing, home furnishings, and equipment.*

Relate how housing, home furnishings, and equipment skills may be utilized in other occupations.

Determine how career choices influence housing choices.

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

F. Relating Knowledge and Skills in Housing, Home Furnishings, and Equipment to Jobs
  1. Entry-level jobs
    a. Home furnishings

Review selected references to identify entry-level jobs in home furnishings. List entry-level jobs to discuss with class. Did you identify jobs such as: salespersons, assistant upholsterers, assistant drapery makers, assistant cabinetmakers, assistant furniture refinishers, workroom personnel, designer's assistants, etc.?

Summarize the types of available entry-level jobs related to home furnishings. Bring the classified section of a newspaper to class. Locate ads concerning employment opportunities in occupations related to home furnishings. Circle the jobs that may be suitable for a teenager at the entry level. Share the job description with class.

    b. Housing

Investigate an entry-level job related to housing. Find out educational requirements, skills needed, and the job prospects. Use the *Dictionary of Occupational Titles* and the *Occupational Outlook Handbook* from the U.S. Department of Labor Statistics for your research. Report your findings to the class.

Read government bulletins on occupational opportunities to determine the availability of personnel for housing-related occupations. How would an inadequate supply of such personnel affect the housing field? entry-level jobs in the housing field?

    c. Service

Visit an appliance repair shop, a large firm where ground maintenance workers are hired, or a garden shop or nursery. Interview the employer to determine the skills and other requirements necessary for an entry-level employee in these occupational areas. Share your findings with the class. How could you create your own job?

Listen to a panel of persons with occupations in the area of housing, home furnishings, and equipment discuss how they got started in their career field and what skills they possessed. [NOTE TO TEACHER: Resource people might include interior decorators, architects, HECE students working in housing and home furnishings related jobs, landscape architects, nursery and garden shop owners,

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	appliance repairpersons, managers of furniture stores, etc.]
2. Application of skills to other occupations	Brainstorm to list ways in which you might use housing and home furnishings information and skills in other occupations. How might you use knowledge gained in housing and home furnishings in your personal life? Your list might include items such as: decorating a dorm room or first home, decorating an office, using the elements and principles of design in selecting clothing, caring for plants, promoting conservation of resources in the home or office, etc. Discuss responsibilities associated with entry-level jobs related to housing and home furnishings. What personal characteristics are desirable? How would many of these characteristics also be important in other occupational areas? View Teaching Aid 48 to identify attitudes that can help or hinder your success on a job. Why are certain attitudes important for success on the job? How can negative attitudes hurt your chances for job success? Role play situations to show how good and bad attitudes can help or hinder your success on the job. You may use the attitudes identified in the previous activities to role play.
3. Effects of career choice on housing	Brainstorm to identify the ways the choice of various careers would affect your choice of housing. How might frequent career moves affect one's choice of housing? Discuss the positive and negative limitations placed on housing by career choices. Write a paragraph describing how your parents' careers have influenced the type housing you live in. Include a summary of the type housing your parents started with and the type of housing they now live in. Interview your parents to discover what expectations they have for their housing after the children leave home. Include the information in your paper. At the end of your paper predict how your current career choice might influence your choice of housing.

HOMEMAKING II

HOUSING, HOME FURNISHINGS, AND EQUIPMENT
HOMEMAKING II

COMPETENCY: *Ability to analyze functions of housing*

SUB-COMPETENCIES: *Describe ways housing gives protection to its occupants.*

Justify the needs of individuals for a permanent housing base or headquarters.

Describe ways housing provides privacy for its occupants.

Determine ways individuals express creativity through housing.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
A. Functions of Housing	View Teaching Aid 49 to gain a better understanding of the functions of housing. Compare the functions of housing needed in the past with functions needed today and possibly in the future. Discuss how housing which provides adequate protection in one geographic location or time may not suit the needs of another location or time. For example: housing in earthquake areas, in hurricane regions, in colder regions, in tropical regions, during the western expansion, in the agricultural era, etc. Discuss the ways housing meets the needs of its occupants physically and psychologically. [NOTE TO TEACHER: Teaching Aid 50 lists physiological, sociological, and psychological housing needs.]
1. Protection	Explain ways housing provides protection. Work in pairs to give examples of ways housing provides protection. One student identifies a need for housing protection; the other suggests aspects of housing that provide the needed protection; then the two students alternate roles. Examples of housing protection needs: illegal search and seizure, burglary. Relate the protection needs of the past to the protection needs of the present. Show how other cultures have (had) housing protection needs that are different from needs in the United States today. How much of the protection provided by today's housing is psychological?
2. Headquarters	Define the term *headquarters*. [NOTE TO TEACHER: *Headquarters* may be defined as the center of operations or a permanent base.] What facilities in the home make it a center for the individual's or family's activities? Identify the needs of people to have a headquarters. Discuss ways today's housing helps provide a center for activities. Explain the role of housing in providing a headquarters. Give examples of times one "goes home," such as after work or school or for special occasions after one is grown.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	View pictures of families displayed by your teacher and predict the type of headquarters each family's life style requires. How do changing life styles affect the types of headquarters required? How may the life style function of housing be expanded through telephone extensions, intercom systems, home computers, study areas, hobby rooms, workshops, etc.? [NOTE TO TEACHER: Pictures of families should include various nationalities, dual-career families, number of family members, and ages. Be sure to include a single-parent family, a couple after the children are grown, and a couple without children.]
3. Privacy	Brainstorm to name the ways housing provides varying degrees of privacy for its occupants. State times when privacy is needed by family members. How may housing provide this privacy? In what ways does housing sometimes fail to meet needs for privacy? Discuss ways various factors influence the privacy of family members. How do room arrangements and activities of family members affect privacy? Discuss how door and window placement, landscaping, fences, and placement of house on a lot affect privacy. Can radios, televisions, record and tape players, and video games affect the privacy of family members? Explain.
	View pictures of floor plans to identify factors influencing the amount of privacy provided. Look at each floor plan and write its identifying name or number on a sheet of paper. List factors that affect the privacy afforded by different areas of the floor plan. Analyze these factors and point out ways these factors may be altered or changed to provide maximum privacy. [NOTE TO TEACHER: Provide students with floor plans that include furniture layouts. Mount the floor plans on construction paper or poster board, and number or name each floor plan. Students can work with the floor plans individually or in small groups.]
4. Self-expression	Look at the word "self-expression" which your teacher has written vertically on the chalkboard. Select a word or words beginning with each letter of the word "self-expression" to cite ways families express themselves through housing. [NOTE TO TEACHER: Examples of self-expression could be: S–size and space, E–eating facilities, L–location, F–furnishings, E–entertaining style, X–xylographs, paintings, and photos, P–personal possessions, R–recreational pursuits, E–energy concerns, S–sleeping arrangements, S–storage areas, I–individual interests and hobbies, O–outdoor living facilities and yard, N–nationality and cultural background.]

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

Show ways people express themselves through housing. Study the classified section of a newspaper to find key adjectives which appeal to people's desire for self-expression through housing. Look for words or phrases such as beautiful, quietly dramatic, elegant, charmer, cottage, garden spot, country charm, and contemporary. Discuss the adjectives with class.

COMPETENCY: *Ability to justify the needs of individuals for living space*

SUB-COMPETENCIES: *Describe living space needs based on the differences in individuals and families.*

Determine factors to consider when planning storage and work areas.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
B. Space for Housing 1. Space needs for liveability a. Personal space	Brainstorm to define *personal space*. Did you define personal space as your own private area or place? To be considered personal space, is it necessary to use the space over a long period of time or for only short periods of time? Explain. Why is personal space important? Does personal space give an individual privacy? an opportunity for self-expression? a place for storing possessions? a feeling of belonging? Discuss the areas you consider your personal space. Examples of personal space: room, bed, desk, drawer, closet, shelf, chair, etc.
b. Shared space	Define *shared space*. Did you define shared space as any space that is used by more than one person? Give examples of shared space. Examples: in the home–kitchen, living room, den, dining room, bathroom, and often bedrooms, closets, etc.; in the community–public buildings, restaurants, streets, theaters, etc. Discuss the advantages and disadvantages of shared space. Discuss how to avoid disagreements about shared space. How can consideration and respect for others aid in solving space sharing problems?
2. Storage and work areas	Read selected references to gain a better understanding of how the amount and arrangement of storage is influenced by the family's composition, needs, living space, interests, and income. Share your findings with the class. Discuss how adequate and functional storage helps meet family needs and contributes to efficiency in performing household activities. Why is it necessary to plan storage areas? [NOTE TO TEACHER: A field trip through a new home, an older home, a mobile home, and an apartment would give students the opportunity to see how storage space can be utilized. If a field trip is not possible, slides or transparencies could illustrate the utilization of space.]
a. Planning storage areas	View pictures which illustrate different types of storage arrangements. Discuss how the storage space meets the needs of family members. Point out how families' activities, possessions, facilities, and methods of working influence storage arrangements. Select a specific family activity and prepare a report summarizing related storage needs. Present your report in class.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Compare the storage needs of a couple in the first stage of the family life cycle with storage needs of a family with one young child. Predict ways the second family's needs will change with the addition of another child. Predict ways their needs will vary according to the sex of the additional child.
1) Organization plans	Read selected references to identify the principles of storage. Share your findings with the class. List the principles of storage on the chalkboard. Storage principles include: store frequently used items at the place of first use; store items so they are easy to see, reach, grasp, and replace; stack only items that have the same dimensions; store unlike items one row deep and one layer deep; provide clearance at top and sides so items are easy to grasp and replace; store heavy items near the height of the elbow; place items together that are used together. Review the principles of storage by working a crossword puzzle using words related to each principle. [NOTE TO TEACHER: Teaching Aid 51 is a crossword puzzle. The answers are: **ACROSS** 1. storage space, 2. see, 3. grasp, 4. duplicate; **DOWN** 1. stack, 2. elbow, 3. replace, 4. dimensions, 5. first, 6. reach.]
2) Types of storage units	Visit a department or hardware store or refer to catalogs and magazines to identify storage units which are available. Report to class on the kinds of storage devices available. Include freestanding portable modular and wall storage units in your report. If possible, bring brochures or pictures of the storage items to show to the class. Examples of storage devices: chests, filing cabinets, metal closets, clothing caddies, clothes bags, step shelves, improvised or movable shelves, permanent shelves, display cabinets, hutches, room dividers, furniture, trunks, bins, boxes, plastic grid systems, units for stereo, etc. Discuss any of these storage devices which can be duplicated or improvised by making them yourself at little or no cost. [NOTE TO TEACHER: Storage units are illustrated on Teaching Aid 94.] Listen to a resource person discuss factors to consider when planning storage areas for physically limited persons. Discuss why the following items should be considered when planning storage for the physically limited: revolving corner units; sliding racks; lazy Susans;pegboard with hangers, shelves, and brackets; backs of doors with hangers, shelves, and brackets; pull-out storage and cutting board, clear plastic boxes and bins; tilt-out bins; low clothes rods; rolling cart or hamper.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Report on inexpensive storage devices and their uses. Divide into small groups and select a number. Report on the storage device that matches that number. Make a list of storage uses for the item. For example, you might report that a large metal or plastic garbage can might be used to store dog food; or the garbage can could be covered with a plywood top and floor length skirt and used as a table while providing storage space for out-of-season clothes, etc. Share the storage ideas in the report to the class. Determine which suggestions are most appropriate. [NOTE TO TEACHER: Number storage devices such as silverware dividers, plastic cartons, cans, jars, cardboard boxes, etc. Have each group draw a number.]
	Make a display of inexpensive and easily made storage devices. Suggested caption: "A Place For Everything."
3) Location of storage	Divide into small groups to discuss problems of storing seasonal items found in most households. Use the principles of storage to solve these problems. Share information with other groups.
	Apply the principles of storage when determining the location to store items in specific rooms. Select one of the following topics for an individual report: kitchen; utility room; bathroom and/or dressing area; bedroom (specify whether for infant, toddler, teenager, adult, elderly or handicapped person); living room; family room, den, or game room; garden room; sewing room; or home office. Refer to references for additional information as needed. Use visuals to add interest to your report. Present your report to the class. [NOTE TO TEACHER: You can assign topics or have students draw a topic. Set a time limit for reports.]
b. Planning work areas	View Teaching Aid 53 to identify the work areas in a home. Discuss home work areas such as the kitchen, utility room or laundry facilities, sewing room or area, garage, etc. Can you name other areas or rooms in a home that could be considered work areas? Explain why they should be considered work areas. Discuss how effective planning of work areas influences their usefulness. How does an unorganized and poorly planned work area affect the efficiency of work?
	Read selected references and make a list of factors to consider when planning a work area. Include organization, arrangement, equipment, and storage factors in the list. Share your list with the class. Compile individual lists for a general list of factors to consider when planning work areas.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
1) Kitchen	Read selected references to identify efficient arrangements for work centers in kitchens. Define *work triangle*. Name the three major pieces of equipment which make up the work triangle. Why is the work triangle an efficient arrangement for the work centers in the kitchen? Why is it recommended that the three sides of the work triangle measure no more than 22 feet? View Teaching Aid 54 and discuss the basic shapes of the kitchens, the work triangles, and the arrangement of equipment illustrated in each. Name the basic kitchen shapes. Which kitchen shape is usually considered the most efficient arrangement? Why? View Teaching Aid 55 to gain a better understanding of planning storage space in kitchen work areas. Discuss why everyday items should be stored close at hand, preferably in the area between waist and eye level. What should be stored in the dead storage space above your head and in deep corners? Where would you store items such as holiday pans and dishes, fondue pots, large roasters, and canning equipment? Discuss storage factors to consider when planning a kitchen for a person in a wheelchair or a person walking with crutches or a cane. [NOTE TO TEACHER: Storage space to meet special needs can be provided by building a shelf above the sink. Narrow shelves, pegboard, and magnetic racks on the shelf can store items used at the sink. Roll-out drawers and pull-out boards under the counters and door-back racks will keep items within easy reach. Cabinet doors which operate by light finger touch are preferable for the physically limited. Storage devices are illustrated on Teaching Aid 52.] Illustrate an efficient kitchen arrangement. Use graph paper and arrange a kitchen using proper scale and size for a work triangle. Share the kitchen arrangement with the class.
2) Laundry	View Teaching Aid 56 and discuss the factors to consider when planning a laundry area. Where may a laundry area be located in a house, apartment, or mobile home? Discuss how a cart with multiple shelves can be used to gather soiled laundry from the bathroom, bedrooms, or kitchen. Can the cart be helpful in returning clean laundry? Explain. Discuss the advantages and disadvantages of having a single area for family members to leave soiled laundry or having hampers in bedrooms, bathrooms, and kitchen for soiled articles. Discuss how built-in bins and baskets or boxes on shelves are convenient for sorting laundry into loads. When planning storage space for laundry supplies, why should the supplies be

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	in easy reach of the homemaker and out of reach of young children? Identify the possible uses of a sink in the laundry area or nearby. Why is it important to consider the door styles when planning space for a washer and a dryer? Why should space for hanging garments be planned in the laundry area? Why is space for a table for folding laundry and an ironing board or small press board for ironing or touch-up pressing useful in plans for a laundry area? Where else could folding be done? Discuss methods of coping with limited laundry space. Discuss storage factors to consider when planning a laundry area for a person in a wheelchair or a person walking with crutches or a cane. [NOTE TO TEACHER: Storage considerations for physically limited persons include: hamper on wheels; supplies stored in easy-to-reach locations near washer and sink; a lightweight iron such as a travel iron; ironing board adjustable in height and leg placement so the person can sit near the ironing board to iron.]
	Explain how laundry areas can be expanded to utility rooms to include space for activities. This space may be for plant and flower care; sewing or hobby area; home office; gift wrapping area; mud closet for work clothes, rain gear, and outdoor wraps; etc. Discuss how the needs of family members are being met by the expanded utility rooms.
c. Planning quiet areas	View Teaching Aid 57 to identify the quiet areas in a home. Discuss the quiet areas in a home such as the bedrooms, bathroom(s), and sun decks or patios. Why is it important for the quiet area to be away from outside noise and street traffic? from the activities of other members of the family? How can the priniciples of storage be applied to storing clothes in a bedroom?
	Read selected references and make a list of the factors to consider when planning quiet areas. Include organization, arrangement, equipment, and storage factors in your list. Share your list with the class. Compile individual lists for a general list of factors to consider in planning quiet areas.
1) Bedrooms	Brainstorm to identify the storage requirements desired in bedrooms. Discuss how storage space requirements vary with the interests of family members. Compare the storage needs of a toddler's room with the needs of a teenager's room.
2) Bathrooms and/or dressing areas	Bring to class a picture of a bathroom and/or dressing area. Pictures can be found in catalogs, magazines, and brochures from paint, wallpaper, and flooring companies.

CONCEPTS **LEARNING AND EVALUATION EXPERIENCES**

Discuss storage space required in bathrooms and dressing areas. Discuss storage factors to consider when the space is shared.

Visit a house, apartment or town house being constructed or a mobile home to analyze usefulness of the work or quiet areas. Select either the work or quiet area to report on. Make a sketch of the work or quiet areas in the dwelling and list factors which help to determine their usefulness and efficiency. Report the information to the class.

Study floor plans to evaluate the storage space found in the dwelling. What is the trend in today's housing? In general, does new housing have more or less storage space than housing five or ten years ago? Explain.

COMPETENCY: *Ability to assess housing choices available for individuals and families*

SUB-COMPETENCIES: *Identify the types of housing available.*

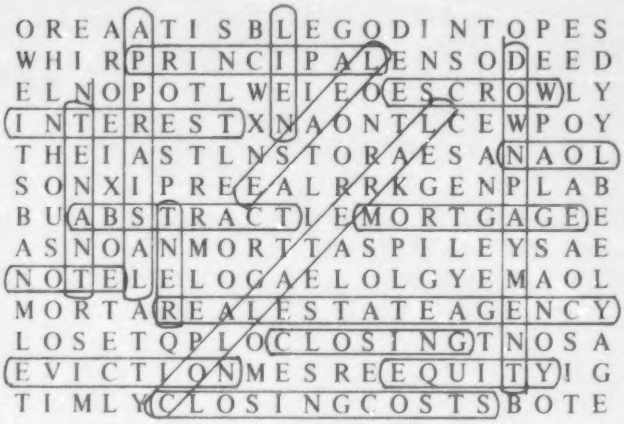
Evaluate various aspects of living space.

Assess consumer concerns related to housing.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
C. Housing for the Family 1. Types of housing	Study the classified section of newspapers to identify types of housing. Examples: apartment, mobile home, house, duplex or multiplex unit, row house, condominium, town house, and cooperative or shared house. Discuss the various types of housing. Does the type of housing available vary from one area or state to another? Explain.
	Participate in a field trip or tour individually to find the types of housing represented in your community. Discuss the most prevalent types of housing.
	Give examples of various types of housing. Divide into small groups to plan a presentation on one type of housing. Select one of the following types of housing to report on: apartment, mobile home, town house, ready built, custom-built, or prefabricated. Study selected references to find advantages and disadvantages of the specific types of housing. Show ways the type of housing can meet the needs of family members. Consider physical needs, social needs, and psychological needs. Use visuals to make your report more interesting. Present the report to the class.
2. Evaluation of living space a. Space needs	Brainstorm to identify factors that influence the space needs of a family. Examples: sizes and ages of family members, activities, furnishings, and stage in the family life cycle. Discuss why the evaluation of living space in relation to family needs is important in deriving satisfaction from housing. Why do space requirements vary from family to family? Explain how various factors influence space needs of a family.
b. Zoning	View Teaching Aid 58 and categorize housing spaces as they relate to living. Examples: quiet zone–bedrooms, study; private zone–bath, dressing room; social zone–living room, den, dining room; work zone–kitchen, utility room, laundry. Discuss the requirements which are created by the activities performed in each zone.
	Collect picture examples of the zones in a dwelling. Explain the characteristics of each. Arrange the pictures on a bulletin board to illustrate the zone areas in a dwelling.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
c. Circulation	View Teaching Aid 59 to recognize circulation patterns in housing. Define *circulation*. Are circulation and traffic patterns the same? Explain factors which determine traffic patterns. Examples: furniture and room arrangement, hallways, and purpose of room. How do poor traffic patterns contribute to accidents in the home? Interfere with conversation or studying? Interfere with watching television or playing video games? View Teaching Aids 60-62 to gain a better understanding of how circulation patterns help to provide housing that is convenient, efficient, and safe. As you evaluate the floor plans, consider the following factors: entrance(s) to kitchen, path from kitchen to dining area, path from kitchen to bathroom, path from bedrooms to bathroom(s), kitchen or bathroom in view of living room, entrance to coat closet, entrance to conversation area, and the rooms in view of front entrance. Discuss the pros and cons of the traffic patterns illustrated in the floor plans. Describe how alterations in floor plans or furniture arrangement may improve traffic patterns. [NOTE TO TEACHER: Provide students with floor plans of apartments, small houses, town houses, duplexes and mobile homes and ask them to discuss the circulation patterns.]
d. Storage	Collect articles on closet storage to share with the class. Discuss closet features necessary for the efficient storage of articles. Discuss the storage requirements for different types of families and individuals. Develop a list of criteria for selecting and evaluating the storage space available in housing. Keep in mind factors that influence housing storage needs and selection as well as construction. How might a family's choice be influenced by current possessions? by future needs and wants?
e. Appearance	Participate in a buzz session to list ways appearance of housing may affect housing decisions. If you have moved, describe your feelings related to appearance of specific housing in which you have lived. What was your first reaction to seeing some of the homes in which you would live? What influenced your first impression? Did your impression change? Why? Summarize how the appearance of housing may influence an individual's attitudes toward it. Show the relationship of appearance and housing decisions by taking a field trip or examining pictures of housing suitable for a specific family. The housing choices should vary in cost. Select the housing you would choose for the family. How did appearance influence your decision? Discuss.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
3. Consumer concerns a. Terminology	Study selected references to define terms related to renting or home ownership. Define the following terms: *rent, tenant, landlord, lease, sublease, security deposit or rent deposit, eviction, lease renewal, lien, children or pet clause, mortgage, note, principal, interest, closing, closing costs, abstract, deed, appraisal, loan, collateral, equity, escrow, down payment, realtor, real estate agency, binder, earnest money.* Discuss and compare your definitions with those of classmates. [NOTE TO TEACHER: Show the students copies of a lease, deed, and other forms used with renting or buying a home.] Review terminology associated with renting or home ownership by completing a seek-and-find puzzle. The terms in the puzzle are spelled diagonally, horizontally, vertically, or backwards. To check your puzzle answers take turns reading and defining each circled term. [NOTE TO TEACHER: Teaching Aid 63 is a seek-and-find puzzle. The answers are circled on the puzzle below.]


O R E A A T I S B L E G O D I N T O P E S
W H I R P R I N C I P A L E N S O D E E D
E L N O P O T L W E I E O E S C R O W L Y
I N T E R E S T X N A O N T L C E W P O Y
T H E I A S T L N S T O R A E S A N A O L
S O N X I P R E E A L R R K G E N P L A B
B U A B S T R A C T L E M O R T G A G E E
A S N O A N M O R T T A S P I L E Y S A E
N O T E L E L O G A E L O L G Y E M A O L
M O R T A R E A L E S T A T E A G E N C Y
L O S E T Q P L O C L O S I N G T N O S A
E V I C T I O N M E S R E E Q U I T Y I G
T I M L Y C L O S I N G C O S T S B O T E

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
b. Legal aspects	Summarize basic legal aspects which affect housing. Interview or listen to a resource person such as a banker, loan officer, title company representative, realtor, or apartment manager discuss expenses and legal aspects of home ownership and renting. Why are both legal and financial advice important when purchasing a home? What should you find out before signing a lease? How do city zoning ordinances regulate housing? Discuss city ordinances which relate to housing where you live. Discuss services of the legal aid society relative to housing. What is usually provided in a homeowner's policy? What protection does a renter have? Who is protected by a written lease? Explain. What responsibilities are assumed by a renter? What are the local and state regulations relative to rental property? Which legal aspects of housing

are most commonly violated in the community or area where you are living? Discuss the legal and financial help which is available to a family who wishes to rent in a community. How do families find out about these services? Why should legal aspects of housing be a concern of consumers?

Point out local resources that can assist families with housing. Select one of the following resources and explain how it may be involved in the acquisition of housing: welfare agencies, county relief offices, church offices and organizations, veterans' groups, Veterans Administration, Federal Housing Administration, builders and contractors, realtors, social or family service organizations, and other agencies or resources in your community. Specify in your report whether the selected agency assists in securing housing for renting or buying. If possible, interview someone representing the resource you are reporting on. In your interview include such questions as: How do they help families secure housing? What are their policies for providing housing assistance? What criteria is used in determining a family's qualifications to secure housing? Present your report to class.

COMPETENCY: *Ability to analyze factors influencing interior decoration of housing*

SUB-COMPETENCIES: *Relate influence of background elements to the total atmosphere of a room.*

Point out factors to consider when selecting and arranging furniture.

Determine factors to consider in furnishing a room.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
D. Interior Decoration 1. Room plans	Brainstorm to arrive at a definition of interior design. Study selected references to locate definitions of interior design. How similar is your definition to those commonly accepted? Review the elements and principles of design and tell how they relate to interior design. Discuss the ways interiors may be personalized. What makes your dwelling "home"?
	Work individually or in small groups to prepare a report on energy management through interior decoration. Gather information from textbooks, magazines, journals, and persons employed in home furnishings occupations. Consider such factors as blinds, shades, and drapery linings; ceiling and attic fans; arranging furniture and rugs to avoid blocking heating vents or radiators; using fluorescent lighting rather than incandescent bulbs; advantages of pastel walls and light-colored interior decor; floor, wall, and ceiling installation; etc. Share report with the class.
a. Walls, ceilings, and floors	Illustrate the importance of floors, walls, and ceilings in interior design. Divide into small groups to describe how floors, walls, and ceilings influence your everyday life. How do these background elements set the mood for the room? Translate your group's idea to the class through a skit.
	Listen to a resource person present examples of various types of floor, wall, and ceiling coverings and finishes. Name the three basic types of floors. Give examples of each. What does resilient mean when referring to floor coverings? What determines the quality of rugs and carpets? Identify the current trends of floor, wall, and ceiling coverings being used in housing.
	Explain the characteristics of various types of floors, walls, and ceilings. Work in small groups and select one of the following topics to report on: 1) FLOORS–asphalt tile, brick, carpeting, rugs, ceramic tile, concrete, cork tile, linoleum, rubber tile, stone, terazzo, vinyl-asbestos tile, vinyl sheets, wood, slate. 2) INTERIOR

CONCEPTS **LEARNING AND EVALUATION EXPERIENCES**

WALLS–brick, cork, glass, painted, plastic panels/tiles, plaster, stucco, stone, ceramic tile, wallboards, wallcoverings/plastic, wallpaper/fabrics, wood paneling. 3) CEILINGS–acoustical tiles, fabric, gypsum board, paper, plaster, transparent materials (glass, etc.), wood. Give advantages and disadvantages for each of the finishes listed. Include relative costs and general characteristics of each. Write the information on a worksheet using the following column headings: FINISH, CHARACTERISTICS, ADVANTAGES, DISADVANTAGES, and COST. Share the information with other groups.

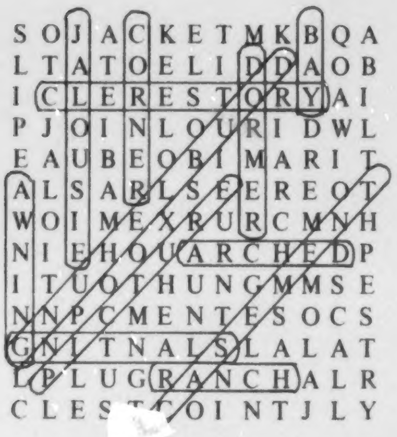
Demonstrate ways that floor, wall, and ceiling finishes can be selected to meet problem situations. Show compatible combinations of floor, wall, and ceiling finishes for a specific situation. Explain why you selected each combination. How may backgrounds be used to highlight or subdue structural aspects of the room, direct attention to furnishings, change the apparent shape of the room, absorb sound, or reflect light? What moods may be created by backgrounds of a room?

b. Windows and window treatments

Identify the functions of windows. Examples: light, ventilation, view. Are all windows functional? Discuss the functions of windows. What are the pros and cons of windowless rooms? Which rooms in a home are more likely to be without windows? Why? Why are the classrooms in some schools without windows? What is your reaction to this? Discuss the pros and cons of windows that are permanently sealed.

Show different types of windows. Work in small groups to study references and prepare a handout on various types of windows. Find pictures of the types of windows. Include sketches and functions of each window type.

Review the basic window types by completing a seek-and-find puzzle. The terms in the puzzle are spelled diagonally, horizontally, vertically, or backwards. To check your puzzle answers take turns reading and describing each circled term. [NOTE TO TEACHER: Teaching Aid 64 is a seek-and-find puzzle. The answers are circled on the puzzle on the following page.]



S O J A C K E T M K B Q A
L T A T O E L I D D A O B
I C L E R E S T O R Y A I
P J O I N L O U R I D W L
E A U B E O B I M A R I T
A L S A R L S E E R E O T
W O I M E X R U R C M N H
N I E H O U A R C H E D P
I T U O T H U N G M M S E
N N P C M E N T E S O C S
G N I T N A L S L A L A T
L P L U G R A N C H A L R
C L E S T C O I N T J L Y

Describe various window treatments. View a film, filmstrip, or slides on window treatments such as curtains, drapes, shades, shutters, cornices, lambrequins, and valances. Or find picture examples of different types of window treatments. Summarize the advantages and disadvantages of each type of window treatment. For which function would each window treatment be appropriate? How could window treatments be used to create a focal point, coordinate color, increase or decrease apparent size, change shape, and minimize or emphasize structural features? Which window treatments are the least expensive?

c. Lighting

Identify the functions of lighting. List the functions of lighting, such as providing light and adding beauty. Why is light needed? In what ways may light add beauty? How can lighting contribute to your well-being?

Apply functions of lighting to various situations. Collect pictures of lighting. Point out the function of the lighting in each picture.

Analyze specific lighting problems. Divide into small groups and determine ways to improve the following conditions: a study desk has a very dark top; the only source of light in a large room is a single high-intensity lamp; general lighting in a room is provided by a bare bulb in the ceiling; bathroom light switches are placed too high for small children. Share your group's improvement plans with other groups.

Study a light reflection chart which tells the percentage of light reflected by various colors. Determine how light

80

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	from windows and the amount of light reflected by floors, walls, and ceilings influences the type and amount of artificial light needed. How does a dimmer switch control lighting?
d. Special room areas	Brainstorm to list special areas in rooms, such as areas for conversation, entertainment, study, music, or a hobby. Discuss how special areas in rooms may be planned to provide privacy or a center for specific activities in a room. Discuss ways various areas in rooms can serve more than one function. Describe a special room area in your home. Explain ways to provide special areas in rooms. Use pictures of room settings to show ways to provide special room areas. Examples: using area rugs to visually divide space; painting different areas different colors; and using room dividers.
2. Furniture a. Selecting furniture	Read selected references and identify factors that influence selection of furniture. Define *family resources.* Explain how family resources affect furniture selection. List factors that influence the selection of furniture, such as tastes, family resources, size of family, stage in family life cycle, activities of family members, social status, tradition, and values. Discuss with the class how these factors influence furniture selection. Show ways to evaluate alternatives in selecting furniture. Work in small groups and prepare a handout on sources of information related to furniture selection. List ways one can evaluate alternatives available. Include buying information; "design plan"; use of fabric swatches, color samples, and pictures; checking reliability of stores; reading labels, seals, and tags; asking questions; inspecting merchandise; and comparing price and quality. Point out questions one might ask in making furniture selections. Include questions such as: Will it fit the purposes for which it is intended? Is its quality appropriate for its use? Will it fit the interior design of the room? Do family members like it? Will it fit the budget? Read selected references or view a film or filmstrip to identify quality features in furniture construction. Discuss the different kinds of wood, veneers, and other materials and techniques used in the construction of furniture such as *dovetailing, glue blocks, center guides on drawers,* and *dust-proof panels.* Listen to a furniture salesperson explain features of durable, well-constructed furniture. Summarize quality features in furniture by using real items or pictures to illustrate the characteristics of quality furniture.

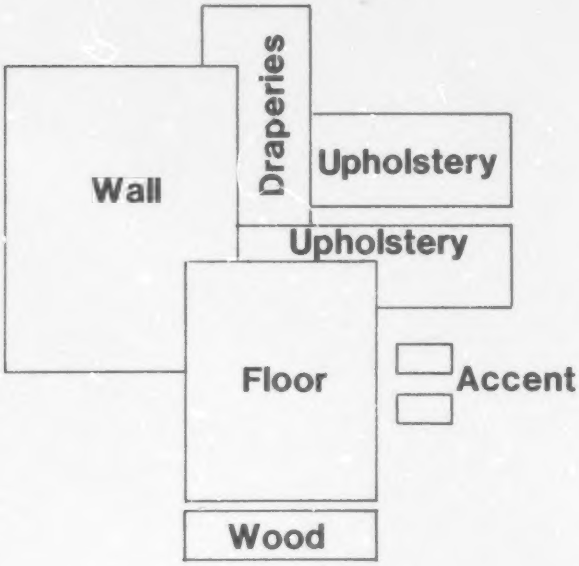
CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Point out factors influencing quality of furniture selected. Suppose you were to obtain $300 that could be spent for furniture. Determine one piece of furniture you would buy. Why would you choose this piece? Report to the class and explain how it would add comfort, function, and appearance to a home. How much would it cost? Would this piece be used for a long time or for only a short time? How does this influence the quality selected? Outline the factors influencing the quality of furniture. [NOTE TO TEACHER: Students could help plan the purchase or renovation of a piece of furniture for their home. They could share the project with the class.]
b. Arranging furniture	Identify rules of furniture arrangement. Discuss why design and function are considerations in arranging furniture. Cite rules for arranging furniture by reviewing factors that should be considered in placing furniture. Examples: conversational groupings, safety, traffic patterns, principles of design, activities, area for dressing, center for reading, a place for enjoying hobbies, etc. Apply rules of furniture arrangement. Examine the floor plan of a living room. Use the rules of furniture arrangement to prepare a comfortable arrangement. [NOTE TO TEACHER: Students can use the rules for furniture arrangement in rearranging the furniture in one room of the home. They can report the results to the class.]
3. Accessories	Brainstorm to define the term *accessories* as related to home furnishings. State the meaning of the following terms: *functional accessories, decorative accessories,* and *objects of art.* Discuss the types of accessories used in the home. Include pictures, lamps, mirrors, pillows, books, plants, collections, and table top accessories. Discuss factors that affect the selection of accessories. Describe how these factors influence the selection of accessories. Give examples of accessories for which care requirements may outweigh the enjoyment gained from them. Discuss how accessories may become outgrown or outmoded. [NOTE TO TEACHER: For FHA/HERO, have students visit speciality shops which sell accessories for the home or invite a resource person to teach members to make accessories in which they are interested.] Summarize rules for accessory arrangement. Work in small groups or individually to prepare a demonstration on one of the following topics: 1) arranging collections and small objects related in shape, color, or purpose, 2) arranging decorative items on the wall, 3) using discarded items as decorative accessories, or 4) making

accessories which can stretch the budget. Use visuals and objects with the demonstration. Discuss the rules for accessory arrangment which are applicable to your demonstration.

Make a list of inexpensive or found objects which could be used as home accessories. List as many items as you can for each letter of the alphabet. Include objects such as gelatin molds, bottles, cans, shells, leaves, pressed flowers, tree branches, rocks, driftwood, plants, quilts, needlework, clothing, prints, posters, buttons, postcards, etc. Describe ways each item or group of items could be used as accessories.

4. Furnishing a room

Prepare a collage showing selections for a decorating scheme. Choose a picture and floor plan of a house and plan a collage of the walls, floor, window treatments, wood, and accessories for at least two of the rooms, or for the complete dwelling. Use fabric swatches, wallpaper samples, paint swatch samples, and floor covering samples, if possible. Mount these on heavy paper or cardboard and write a brief description of each, including the effect desired for each room, whose room it is, and the purpose of the room. Give the exposures of the rooms and any additional information you want to add. To make the collage, cut out pieces of paper or samples representing the floor, walls, window treatments, accessories, furniture (wood and/or fabric). Cut the samples in sizes equal to the approximate proportions in which they will be used in the room. Then carefully arrange these samples on a background which is heavy enough to support them, such as lightweight cardboard or a manila folder (see the illustration below). Discuss how this



method of showing selections for a decorating scheme is used by interior decorators and home builders. What are the advantages of using such a method?

Participate in a housing field trip. Visit various types of housing units. Evaluate the decorating schemes. Make notes and share your observations with the class. [NOTE TO TEACHER: Students could evaluate housing layouts in magazines if a field trip is not possible.]

COMPETENCY: *Ability to analyze factors influencing renovation and remodeling of housing*

SUB-COMPETENCIES: *Identify general considerations in renovation and remodeling of housing.*

Determine the importance of planning in renovation and remodeling of housing.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
E. Renovation and Remodeling of Housing	Study references to identify the difference between *renovation* and *remodeling* of housing, and between *depreciation* and *appreciation* of property. Identify and list fac[illegible] to consider in renovation and remodeling suc[illegible]ing permits when necessary and selecting pro[illegible]rials. Can renovation prevent depreciation? Why? Share the information with class. Discuss how renovation and remodeling may aid in making satisfying housing decisions. Describe the importance of planning renovation and remodeling projects. Work in small groups to ask persons who specialize in remodeling, such as architects or builders, to explain when it pays to remodel. Why should the costs of renovation and remodeling be determined before making decisions? Consider the cost of remodeling or renovating housing by listing the costs of architect services, plumbing, carpenter work, materials, etc. Discuss the factors influencing each of the costs. Describe ways costs may be reduced by "do-it-yourself" projects. Study references on restoration projects in your town, state, or nation. Examples: first homes in city, places of worship, and public buildings of historical significance. In class, discuss the plans for their restoration.

COMPETENCY: *Ability to analyze career and job opportunities related to housing, home furnishings, and equipment*

SUB-COMPETENCIES: *Examine professional career opportunities related to housing, home furnishings, and equipment.*

Project trends for professional job opportunities related to housing, home furnishings, and equipment.

CONCEPTS

F. Planning a Career in Housing, Home Furnishings, and Equipment
   1. Professional careers

LEARNING AND EVALUATION EXPERIENCES

Listen to a local home economist or other resource person present information on professional careers related to housing, home furnishings, and equipment. [NOTE TO TEACHER: Some of the professional careers related to housing, home furnishings, and equipment include interior designer, furniture store manager, furniture or accessories designer, equipment designer, landscape architect, architect, equipment tester, draftsperson, real estate agent, appraiser, home inspector, textile technician, household products technician.]

Look up descriptions of professional jobs related to housing, home furnishings, and equipment in the *Directory of Occupational Titles.* Study the descriptions and make a list of the jobs you are most interested in. Include descriptions of these jobs on your list. Ask your high school counselor whether professional job opportunities in this field are increasing or decreasing. What is the anticipated trend for the next five years? Share your findings with class.

Interview a person employed in one of the housing- and home furnishings-related careers you are most interested in. What are the responsibilities of the person? What are the advantages and disadvantages of this career? What was the education and work experience of the person you interviewed? Summarize your findings in a report to the class.

Write to professional organizations to obtain information about careers related to housing, home furnishings, and equipment. What education is required for each? What colleges and universities in your area provide education for careers related to housing, home furnishings, and equipment? Share your findings with class.

Study college catalogs to learn what courses are required for a degree in home economics with a major in interior design. What high school courses would be beneficial for this major?

Listen to a local housing builder or contractor speak on career opportunities for the home economist in the field of housing. Is advanced training required? Why?

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
2. Career advancement	Interview a professional in the field of housing, home furnishings, or equipment. Find out what opportunities for advancement are available to the beginning professional. What opportunities are available in the area of management, administration, and self-employment? Is additional education needed for advancement? Are additional skills needed? Read a book on interpersonal or communication skills which can aid career advancement in any field. Make a report to the class on one or more of the skills you learned about. Involve the class in discussion, activities, or role play related to the book.

HOMEMAKING III

HOUSING, HOME FURNISHINGS, AND EQUIPMENT
HOMEMAKING III

COMPETENCY: *Ability to determine the factors affecting housing needs throughout the life cycle*

SUB-COMPETENCIES: *Describe environmental factors affecting housing needs.*

Describe human factors affecting housing needs.

Identify special requirements affecting housing needs.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
A. Factors Affecting Housing Needs Throughout the Life Cycle 1. Family life cycle	Review the stages in the family life cycle illustrated on Teaching Aid 65. Define the term "family". Did your definition of family include the dual-career family, single parent family, and the remarriage family as well as the traditional family? Discuss how family housing needs may be influenced by the stage in the family life cycle. Describe living space needed by families in each stage of the family life cycle. Discuss how dual roles of males and females may affect housing needs at the various stages of the family life cycle. Present skits that dramatize housing needs at different stages in the family life cycle. Summarize the needs that are shown in the skits. Analyze housing available in your community. Determine housing to meet the needs of a family at a specific stage of the family life cycle. Discuss guidelines for planning living spaces to meet the needs of families as they pass from one stage in the family life cycle to the next. Predict housing needs of families in various stages of the life cycle. Work with your family to determine ways your family's housing needs will change as you enter the next stage of the family life cycle. Discuss these predicted housing needs with the class.
2. Environmental factors	Study selected references to identify environmental factors that may affect an individual's or family's housing and home furnishings decisions. Examples: climate, social considerations, culture, community, economic considerations, politics, availability of housing, and technology. Discuss ways these factors may affect a specific family's housing decisions. Bring to class newspaper or magazine articles describing the effects of environmental factors on housing choices. Examples: modular housing, plastics in housing and home furnishings, apartments, duplexes, mobile homes, town houses, condominiums, inflatable houses, underground

CONCEPTS **LEARNING AND EVALUATION EXPERIENCES**

houses, and solar houses. Share the articles with the class. Discuss the influences of environmental factors on family housing and home furnishings decisions. How have environmental factors influenced housing decisions in the community where you live? Relate environmental factors to your family's housing. How have environmental factors influenced your family's housing and home furnishings decisions?

Show ways availability of housing and federal and local housing regulations in your community influence the housing decisions of a given family. Relate your findings to other communities. Point out reasons there can be no "magic formula" for producing housing which meets the needs and desires of all families.

View a film which shows housing in various parts of the world. Analyze ways social, economic, and cultural factors affect housing.

Work in small groups to determine the influences of scientific and technological factors on current housing designs. Show illustrations to point out these influences to the class.

Prepare a bulletin board showing future environments and future housing. Predict the types of housing environments which may exist in the future because of advancements of science and technology. Examples: underground, underwater, solar, and outer space housing. If possible include newspaper and magazine pictures and articles on the bulletin board.

Work individually or in small groups to design or describe a type of housing for the future. Integrate the effects of population, pollution, energy conservation, and advancements of science and technology in your design. Point out the type of energy, water, and air control systems which might be suitable. Present the design to the class. [NOTE TO TEACHER: Students could give short reports on housing of the future. Suggested topics: planned communities, cluster housing, building materials for homes of the future, and possible effects of outer space on housing of the future.]

3. Human factors

Brainstorm to formulate definitions of family *values, goals,* and *standards.* Name ways in which these may be expressed in housing. Discuss how a family consciously or unconsciously expresses its values, goals, and standards through housing. How do values, goals, and standards interrelate?

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Read case studies that show ways in which values, goals, and standards influence housing choices. [NOTE TO TEACHER: *Case Study One.* The Norris family of five which includes two small children and Mrs. Norris's mother has just purchased a house on three acres of land in the southwestern part of the United States. This acreage provides a play area for the children and allows space for a garden. The two-story house has living room, dining room, three bedrooms, kitchen, pantry, bath, open front and back porches, and two large storage closets. There is a full basement, but very little attic space. *Case Study Two.* Martha and Milton James are newlyweds. Martha has just been promoted to assistant manager of a local variety store. Martha and Milton selected a studio apartment near Martha's work and near a shopping center because they do not own a car. The apartment is plainly decorated, but has space for overnight guests. They plan to add personal touches to the decor.] Work individually or in small groups to determine values from the following list which may apply in the case studies: privacy, space, prestige, education, beauty, love of nature, physical health, economic security, neighbors, social position, and family associations. Give reasons for selecting specific values.
	Predict housing goals each family above might set for the future, such as addition of more storage space, purchase of dual-purpose furniture, making room accessories, or adding another room. Discuss ways the family's standards may or may not have been met by their present housing. Suggest ways of meeting standards that were not met. Discuss how a family's housing decisions are more likely to be satisfactory if consideration is given to priorities of values, goals, and standards. [NOTE TO TEACHER: Other case studies might include single adults, dual role couples, family with handicapped member, and an elderly retired couple.]
a. Resources	Brainstorm to identify the different types of resources which might be used in providing family housing. Examples: energy, skills, community, ideas, and beliefs. [NOTE TO TEACHER: Teaching Aid 66 identifies personal resources.]
	Describe how resources are exchangeable or interchangeable. Examples: energy instead of money, money instead of time, and creativity instead of money. How may substituting resources affect the way housing needs are met?
b. Needs and wants	Brainstorm to list housing needs and wants in your future. As a class, separate the needs from the wants. Discuss reasons for changes in a family's housing needs and wants in

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	various situations. Give examples to illustrate how something that was once considered a want by most families is now considered a need. Why has this occurred? Discuss how each of the following may be considered a want by one family and a need by another: refrigerator, draperies, floor coverings, air conditioner, and dehumidifier. Predict the effect of a change in family composition on housing needs and wants. Discuss changes in housing needs and wants that may occur in the stages of the family life cycle. Examples: a family is in the launching stage and their last child will be leaving home soon; a family decides to add a room to their present housing; a family is expecting the birth of a new child; a family desires a guest room; a woman with two children living with her marries a man whose three children visit on weekends and holidays; a middle aged couple with teenagers invite an elderly parent to live with them; a young divorcee with a small child needs inexpensive but safe housing. In each example, what changes in needs and wants may occur?
c. Interests, activities, and patterns of living	Read selected references to gain a better understanding of how a family's interests, activities, and patterns of living influence housing requirements. Relate interests, activities, and patterns of living to housing requirements for specific families. Consider cost, space, and furnishings. Discuss how housing is influenced by an individual family's tastes, preferences, and concepts of aesthetic beauty. Prepare a bulletin board of accessories, rooms, homes, and buildings which you consider beautiful. Use these to point out ways in which your tastes and preferences and concepts of beauty differ from those of others.
d. Mobility	Describe the influence of family mobility on housing decisions. Discuss the following questions: How might high mobility influence a family's housing decisions? Would housing decisions differ if a family stayed in one place for a long time? Why? Research family mobility and the changes that have occurred over the past twenty-five years. How has housing been affected by the changes in family mobility? What is the present relationship between family mobility and the national economy? Interview adults to determine human factors which have influenced their housing and home furnishings decisions. Share your findings with the class.
4. Special requirements	Listen to a resource person explain types of mental and physical disabilities and ways they affect housing and

CONCEPTS **LEARNING AND EVALUATION EXPERIENCES**

home furnishings needs. [NOTE TO TEACHER: Suggested resource persons knowledgeable about needs of the disabled are Red Cross nurses and Veteran's Administration nurses.] Discuss how alterations in housing have enabled disabled persons to be more mobile and independent. [NOTE TO TEACHER: To become more aware of special needs, students might assume a disability and work at tasks in the home economics department.]

Cite examples of individuals with handicaps that affect their housing needs. Examples may be taken from literature, news stories, or real life. Describe housing facilities which have been planned to meet the special needs of a handicapped person.

Identify activities of the infant and young child. What special housing requirements will they have? Suggest room arrangements and furnishings to meet the needs of an infant or young child in a specific situation.

Study references about special housing and home furnishings needs of the elderly. Give examples of factors affecting the special housing and home furnishings requirements occurring in the last stage of the family life cycle.

Determine the factors which may influence housing and home furnishings decisions in a specific situation. Consider human factors, environmental factors, and special housing requirements. [NOTE TO TEACHER: A panel of adults could be invited to discuss how they have had to adjust to housing facilities and neighborhoods.] Discuss how decisions pertaining to housing and home furnishings can be made for present or long-range satisfaction. Outline factors you feel will affect your housing and home furnishings decisions after graduation. Will your first housing be a house or apartment for a couple, a single's apartment, or a dorm room? What values, goals, and standards do you have for your housing? What resources will be available? What type of housing will you need and want? What interests, activities, and patterns of living may influence your decisions? What tastes and preferences have you developed in housing and home furnishings? Will you likely be mobile? What environmental factors are likely to influence your decisions? Do you have any special housing requirements?

COMPETENCY: *Ability to determine the legal and financial aspects of obtaining housing*

SUB-COMPETENCIES: *Analyze the various factors affecting the cost of housing.*

Point out the advantages and disadvantages of home ownership.

CONCEPTS

B. Cost of Housing
   1. Renting

LEARNING AND EVALUATION EXPERIENCES

Brainstorm to name advantages and disadvantages of renting housing. Discuss the reasons to rent such as no down payment, monthly rental payments may be less than monthly house payments, and fixed rental rates may be available through a lease. Discuss how renting housing may allow more mobility and less responsibility for upkeep than owning. Why is it important to check rental units for tight windows to prevent drafts in cold weather and for circulation of air in warm weather? Should you check on rules pertaining to the installation of a fan or window air conditioner? Explain. Why should security be a concern when selecting a rental unit? Discuss safety features such as locks, peep-holes, security chains, fire escapes, and police patrols or security guards. Should locks be changed if the rental unit has had previous tenants? Why?

Interview people who are renting their housing. Why do they prefer to rent? Do they plan to rent their housing temporarily or permanently? Do they have problems conserving energy in rental housing? Share your findings with the class.

Listen as a resource person such as an apartment manager or real estate agent explains the following: specific legal forms of obligation to be signed by a tenant; specific obligations of a landlord; and financial aspects of renting such as deposit, first and last months' rent, and any special requirements. Discuss obligations and rights of the tenant and the landlord. Is a lease required if rental is on a month-to-month basis? What is the purpose of a lease? Discuss factors to look for in a lease such as amount of rent and when it is due, length of lease, if utilities are included in rent payment, whether pets or children are allowed, and the responsibility for repairs. Name other factors to look for in a lease. Discuss insuring clothing, furniture, and other household goods under a *tenants form* when renting. Discuss the low-cost crime insurance developed by the U.S. Department of Housing and Urban Development which is available in some communities.

Identify terms found in leases by examining sample copies. Find definitions of the terms. Who is the lessor? the lessee? What is a security deposit?

CONCEPTS | **LEARNING AND EVALUATION EXPERIENCES**

Fill out a lease form to discover responsibilities and privileges in renting housing. Discuss the implications of the provisions in the lease for the renter.

2. Buying

Study selected references to discover advantages and disadvantages of home ownership. List and discuss the advantages or disadvantages. Discuss how the conservation of energy may be better utilized under home ownership. Discuss reasons for buying a house such as tax advantages, forced savings, hedge against inflation, and obtaining a certain life style. Discuss the advantages of buying a less-expensive older home to repair and fix up.

Define real estate terms related to home ownership such as *amortized, appraisal, collateral, down payment, title investigation, deed registration, insurance, contract, credit, earnest money, abstract,* and types of *deeds, mortgages,* and *interest.* Keep definitions as a working reference.

Divide into five groups. Each group will choose one requirement associated with housing purchase costs. Study references to determine the meaning and need for each requirement involved in the housing purchase costs assigned to your group. Present your group's findings to the class.

View Teaching Aid 67 to see the difference the amount of the down payment makes toward owning your own home. Discuss the advantages and disadvantages of making a low down payment or a high down payment on housing.

Observe a chart showing how the amount of the down payment and the interest rate and time span of the mortgage affect the eventual cost of a home. [NOTE TO TEACHER: Charts may be obtained from your local housing office or lending establishment.]

Listen to a bank loan officer, realtor, or Federal Housing Administration representative discuss expenses of home ownership. Discuss the following topics: steps in purchasing housing; advantages and disadvantages of various sources of credit for financing purchase of housing; similarities and differences in types of mortgage loans; steps in obtaining a mortgage; alternatives to be considered when selecting a mortgage; and the effect of mortgage terms on the total cost of housing. What are the procedures that take place during the closing of the purchase? Who is expected to pay for the various closing costs? Why is it important to have the owner's (or owners') name(s) on the deed? What kind of homeowner's insurance protection should you look for? Why is a title search and title insurance important to buyers of existing

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	homes? Discuss services and agencies within the community that evaluate housing and make recommendations to potential home buyers. Examples: contractors and architects may offer house evaluation services; a Home Owners Warranty (HOW) protects the homeowner against structural defects; builders and sellers of houses financed by FHA insured mortgages are required to give the buyer a written warranty. Name other services and agencies in your community which evaluate housing for home buyers. Point out factors that may influence the amount of family income to be spent on housing, such as stage in life cycle, number and ages of family members, living patterns, geographical location, and availability of housing.
3. Building	Point out factors to consider when building a house. Examples: planning the design, building codes, zoning laws, tax breaks for energy measures, cost of architectural services and building materials, custom interiors, time for designing and building the home, and where to stay while building. Discuss the advantages and disadvantages of building. Discuss buying an existing house or buying a new house. Which will usually cost less per square foot? Why? Do you actually get more house for the same amount of money? Discuss factors to consider when buying an existing house, such as location, resale value, space arrangement, energy saving features, condition, and possible remodeling and redecorating required, such as replacing drapes, carpets, etc. [NOTE TO TEACHER: An interesting way for students to learn the factors involved in building a house is to follow the progress and construction of a new house in the school district. Students can study the various terms and construction techniques in the classroom and take a field trip to the building site each week-to-ten days. The owner/builder can visit the classroom periodically to update students on the progress. The owner/builder can explain financing the house, how family values went into the planning and decision-making phase, and construction schedule. If construction of the house has started at the beginning of the semester, the house should be scheduled for completion about the end of the semester. During this time students will have followed the process from financing and beginning construction to closing.] Compile information concerning legal and financial obligations associated with building housing. Determine the feasibility of building housing in a specific situation.
4. Renting vs. buying	Read selected references to determine the percentage of monthly or annual income a person should spend on

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	housing. Figure the amount a person should spend on housing given a monthly income. Share your findings with the class. How might the amount available to spend on housing affect the decision to rent or buy?
	Divide into two groups for a debate on renting vs. buying a home. Depending upon the side you will represent, research the pros or cons of renting or buying.
5. Financing a. Lending agencies	Interview five persons who have purchased a home. From what type of agency did they acquire their loan? As a class, determine the most widely used lending institution from your interviews. List any other possible agencies through which a loan might be financed.
	Visit at least one lending institution in your community to find out how a person applies for a mortgage loan and the requirements assessed by the institution before a loan can be granted. Share your findings with class. [NOTE TO TEACHER: If a field trip is not possible, a panel of persons from the various lending agencies may be brought into the classroom to inform students on loan application procedures.]
b. Establishing credit	Brainstorm to formulate a class definition of "credit rating." How is a credit rating established? Why is your credit rating important?
c. Types of mortgages	Listen to an authority on home mortgages summarize the types of mortgages available. Prepare questions in advance for a guest speaker to answer. Include questions on conventional, FHA-insured, VA-guaranteed, FmHA, variable rate, roll-over, and graduated payment. Discuss the advantages and disadvantages of each.
	Complete the worksheet on Teaching Aid 68 to gain a better understanding of the types of mortgages available. [NOTE TO TEACHER: Answers are: 1) FmHA, 2) conventional, 3) FHA-insured, 4) variable rate, 5) graduated payment, 6) roll-over, 7) VA-guaranteed.]
	Examine mortgage forms. Discuss reasons a lender may need the information requested. What are the qualifications for obtaining a mortgage? Explain how FHA-insured, VA-guaranteed, and FmHA mortgages encourage home ownership of qualified families with limited incomes.
6. Taxes	Interview homeowners to identify taxes the homeowner must pay. Summarize community benefits paid for with homeowners' taxes. Examples: schools, sewer lines, roads, and police and fire protection.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Talk with a tax consultant, then explain possible income tax advantages of home ownership. Is the advantage always worthwhile? Why? Share findings with the class.
7. Insurance	Listen to a resource person who is an authority on homeowner's insurance present information related to a specific homeowner's protection needs. What types of homeowner's insurance are available? How are insurance premiums paid? Discuss benefits, premiums, and advantages and disadvantages of insurance related to housing. Compare a homeowner's insurance coverage with the coverage of a renter's policy. Are insurance rates for homeowners the same in all states? Why? What factors affect housing insurance rates?
8. Transfer of ownership	Study references to obtain a definition of *transfer of ownership.* What are other phrases used to describe the transfer of ownership? Discuss the steps included in the transfer of home ownership such as signing the deed, delivering it to the new owner, and recording it immediately in the proper government office.
	Study references about or listen to a resource person explain the steps in transferring ownership. Include contract of sale, deed, certificate of title, abstract, and closing costs. What are the costs involved in each step? What are the legal responsibilities of the original owner? of the buyer?
9. Foreclosure of mortgage	Read selected references to define the term *foreclosure.* Compare your definition to the following: foreclosure is the act of taking back the mortgage from the borrower because of payment default. Discuss the reasons a borrower might default on payments. What measures might the borrower take to help avoid nonpayment?
10. Moving expenses	Review mobility trends in the United States. Information may be obtained from Chambers of Commerce or from periodicals. Approximately how many families move from one address to another each year? What age group tends to move most often? In today's business world, do large compaines tend to move people more or less often than ten years ago? Explain your answer. Give examples from your own experiences and those of acquaintances of reasons people move.
	Listen to a resource person discuss services offered by moving companies. What are the fees for these services? What are the advantages of using these services? What is the company's policy on articles that the homeowner packs for moving? Are employee moving expenses often paid by the employer?

CONCEPTS **LEARNING AND EVALUATION EXPERIENCES**

Divide into small groups to determine the costs and advantages and disadvantages of moving household goods by various methods. Be sure to include information on people moving themselves as well as being moved by professional movers. Discuss both interstate and intrastate moves. Share information with other groups.

Interview persons who have made household moves and find out what suggestions they would make to someone planning a move. Discuss ideas with classmates. Share experiences class members have encountered in moving. Describe specific problems and ways they were handled. Organize class suggestions to formulate orderly steps for moving, from preparation to unpacking.

COMPETENCY: *Ability to evaluate options for housing the family*

SUB-COMPETENCIES: *Identify styles of architecture to meet individual and family needs and interests.*

Determine current housing trends.

Relate housing to family needs.

CONCEPTS

C. Evaluating Housing
    1. Architectural styles

LEARNING AND EVALUATION EXPERIENCES

Define *architecture.* Share your definition with classmates. Was your definition similar to: architecture is the style of a building including design, construction, and decorative treatment.

View Teaching Aids 69-77 to study architectural styles. How do traditional and contemporary architectural styles differ? Discuss how past architectural styles are adapted in today's housing. Discuss architectural styles prevalent in your area, in the state, and in your region of the United States. Do the styles vary or are they similar? Explain. What is meant by architectural fads? Discuss fads in architectural design found in your community. Why did these designs become fads?

Work individually or in pairs to illustrate an architectural style of housing. Examples: Colonial Era (New England or northern colonial, saltbox, garrison, Cape Cod, southern colonial, Georgian, Dutch colonial, log cabin, Spanish, pueblo or adobe, Monterey, Norman, mansard, French colonial or provential), Early National Style (federal, classical or Greek revival), Victorian Age (Victorian, Gothic revival, electic design), Modern (ranch, split-level), Contemporary (A-frame, geodesic, solar, earth-sheltered, plastic or foam). Select an architectural style listed on the assignment cards provided by your teacher. [NOTE TO TEACHER: For assignment cards, write the names of architectural styles on separate index cards.] Explain the origin and meaning of the name of the architectural style. Discuss why the style developed during a certain period in history. Discuss how the style was affected by taxes, heating, purposes, the cost of glass, etc. Illustrate the style with pictures. Point out how the past architectural style is adapted in today's housing. Present the information to the class.

Find examples of ways an architectural style may be continued from the exterior to the interior of housing. Display pictures on a bulletin board. Possible title: "Inside Out." Discuss the advantages and disadvantages of continuity in the interior and exterior of housing. Discuss how some homes do not fit in any style and why that can be an advantage.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
2. Current housing trends	Study the classified section of newspapers to identify types of housing. Examples: apartment, mobile home, house, duplex or multiplex unit, row house, condominium, town house, cooperative, or shared house.
	Discuss the various types of housing. Does the type of housing available vary from one area or state to another? Explain.
	Discuss how each type of housing can meet the needs of family members. Give examples of various types of housing. Describe houses in the community or discuss magazine pictures of housing. Which type of housing is the most prevalent in the community? Discuss the advantages and disadvantages of apartment, mobile home, town house, ready-built, custom-built, or prefabricated housing.
3. Meeting family needs a. Space	Study references to identify the amount of space needed for various home activities. State space needs for one, two, three, and four persons living together in one housing unit. Describe space required for specific activities in the home, such as food preparation, bed making, and clothing storage. Discuss space that may be required by other family activities.
b. Zoning	Summarize the characteristics of the zones or areas found in housing. Name activities that take place in each zone in the dwelling. How does the arrangement of the various zones influence the comfort and livability of housing? [NOTE TO TEACHER: Teaching Aid 58 illustrates the zones found in housing.]
	Tour homes or view floor plans to locate the zones in different types of housing. Explain how the same area may be used for more than one zone. Discuss how the use of zones may vary according to a person's life style or stage in the life cycle. Discuss how furniture can be used to help buffer between zones. Discuss solutions to specific zoning problems such as: bedroom facing busy street, washer-dryer adjacent to bedroom, reading area located near television.
c. Circulation	Formulate a class definition for circulation or traffic routes within housing. Discuss effects of circulation on usability of space. Trace traffic patterns on floor plans, illustrating circulation between rooms, within rooms, and to the outside. In what ways is the traffic pattern in each plan convenient? inconvenient? [NOTE TO TEACHER: Teaching Aid 59 illustrates circulation patterns in housing.]

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Solve a circulation or zoning problem in your own home inexpensively. For example: rearrange furniture or block an unneeded doorway.
d. Storage	Name areas in housing where storage is needed. List items which may be stored in each of these areas.
	Collect pictures of ways to meet storage needs and place them on a bulletin board. Include commercial items which facilitate use of storage space. Suggest items which could be made by the homeowner to improve utilization of storage space. Evaluate the facilities for function, convenience, and care. Discuss features necessary for the efficient storage of articles. Discuss the storage requirements for different types of families and individuals. [NOTE TO TEACHER: Students might look at plans for various types of housing and evaluate storage space.]
	Visit a housing unit (house, apartment, duplex, mobile home, etc.) or view a floor plan to show where items commonly stored in the home may be placed. [NOTE TO TEACHER: For FHA/HERO, students might participate in a work session to make storage aids and devices.]
	Determine the available storage space in specific housing. Point out both built-in storage and storage in furnishings. Analyze the flexibility of available storage space. Will it meet both present and future storage needs?
e. Appearance	Brainstorm to identify housing features such as architectural style, windows, and color harmonies that may affect your feelings. Give examples of ways appearance of housing affects one's feelings.
	View pictures or tour various types of housing to compare features such as design, location, and appearance. Predict the possible effect each housing unit would have on family members. How could the appearance of the housing be improved without spending a large sum of money?
f. Health and safety	Brainstorm to identify aspects of housing that affect health and safety. Examples: temperature regulation, lighting, and ventilation. How does housing provide for health and safety?
	Study books and bulletins to recognize various health and safety hazards in the home. Draw cartoons identifying unsafe conditions often found in homes. Examples: frayed electric cords, loose matches, and oily rags. Discuss preventive measures to eliminate health and safety hazards in the home.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Conduct a survey to find health and safety hazards in the home. Explain ways to eliminate each hazard you find. Use a class prepared list of common safety hazards to locate home health and safety hazards.
	Devise a fire escape plan to use in your home in case of fire. Include a backup plan in case fire blocks the main exit. Conduct a practice escape drill with your family, instructing each family member how to get out of the house from the various rooms and where to meet.
	Prepare a bulletin board using pictures, sketches, or cartoons depicting safe practices in the home. Suggested title: "Rx for Safety."
g. Economic considerations	Cite major costs in providing family housing. Examples: rent or house payment, utilities, maintenance, insurance, and taxes. Discuss how the extent to which families are able to satisfy their housing needs and wants is influenced by their economic situation.
	Give examples of economic changes that affect housing. Examples: increase or decrease in family income, addition of a child to the family, inheritance, depression, or wage freeze. Discuss economic conditions of the past two years that have influenced housing.
	Interview a home builder, real estate person, person employed in a bank or money lending institution, or other persons in the community to gain a better understanding of the influences of economic change on housing. Share your findings with the class.

COMPETENCY: *Ability to determine factors to consider in selecting home furnishings and equipment*

SUB-COMPETENCIES: *Identify characteristics of household textiles.*

Select household linens.

Select window treatments for various types of windows.

Select various types of floor coverings.

Obtain furniture.

Select major home appliances.

Obtain accessories for the home.

Develop plans for obtaining home furnishings.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
D. Consumer Techniques 1. Selecting home furnishings and equipment a. Household textiles 1) Fibers, fabrics, and finishes	Review the characteristics of manufactured and natural fibers. Identify the ways fibers, yarns, fabrics, and finishes influence the properties of textiles. Define *nonwoven textiles.* From what materials are nonwoven textiles made? What are the characteristics of nonwoven textiles?
	Bring samples of household textiles to class. Discuss differences in appearance, content, and construction of the textiles.
2) Fabric care and selection	Brainstorm on factors to consider when selecting textiles for the home. Examples: cost, care required, style of furnishings, intended use, color, and pattern. Summarize the advantages and disadvantages of appropriate fabric care. Why is fabric care important to the life of the textile? Does the care of the fabric influence the type of textile selected?
	Divide into two teams and play a textile game to gain a better understanding of textiles and their characteristics. As the teacher holds up a textile card the teams' members will take alternate turns naming an advantage or disadvantage of the textile. When a team cannot give an advantage or disadvantage the other team will be given a chance to answer. Teams will receive one point for each correct answer. The team with the high score is the winner. [NOTE TO TEACHER: Cards for the textile game can be made by writing the names of textiles on index cards. Be sure to set a time limit for the game.]
3) Linens	Brainstorm to identify the types of household linens. Give examples of each type. View examples of woven and nonwoven textiles used for household linens. Examples:

muslin, percale, terry cloth, terry velour, damask, polyester, cotton blends, plastic, and paper. Discuss elements to which household linens are exposed such as water, food stains, and grime. What characteristics must fabrics have to be suitable for given household linens such as bath towels, dishtowels, tablecloths, and sheets?

Use catalogs or newspapers to obtain prices for each type of household linen. Determine the effect fiber content has on the price of goods. What factors influence the cost of household linens?

4) Window treatments

View Teaching Aid 78 to identify the parts of a window. Discuss the functions of a window. Examples include light control, ventilation, heat loss or gain, and decoration. Why is it important to recognize the parts of a window when measuring for window treatments? Which part of the window most affects energy usage? What term is used to refer to the thickness of the glass? What are the advantages of using insulated glass or plate glass or other types of glass? Which types of glass should be used for energy conservation purposes?

Read selected references to identify the types of windows. What types of windows are in the school? the gymnasium? your home? Are the windows moveable or stationary? How can knowing the parts of a window and the different types of windows aid in measuring for window treatments? Why do different types of windows require different window treatments?

View Teaching Aids 79-80 to learn how to measure windows for various window treatments. Measure a common size window and a window that is irregular in shape. Sketch each window on paper and insert the measurements of each window on the appropriate sketch. Indicate what types of curtain rods are suitable for various window treatments. Discuss why it is important to measure a window accurately before purchasing or selecting window treatments.

Use sample books to point out fabrics suitable for curtains for specific windows. Examples: bedroom, kitchen, living room, east or west windows. Is a sheer drapery best suited for a bedroom or kitchen window? Which fabrics would be suitable for a living room or a bedroom window? Why? Why do window treatments for east windows require special consideration? Discuss factors that would affect the choices of fabrics suitable for window treatments. Examples: drapability, sheerness, ease of care, appearance, energy conservation features, and resistance to fading, shrinking, or stretching.

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

Divide into small groups. Discuss the advantages and disadvantages of fabrics used for window treatments. Consider and compare the following factors: cost, resilience, durability, colorfastness, soil resistance, aesthetic value, and light or heat consumption. Report to the class on the advantages and disadvantages of various fabrics.

View Teaching Aids 81-83 to identify different types of window treatments. Discuss the functions of window treatments. Examples: privacy, light and heat control, and aesthetics. What factors would be considered when purchasing or selecting curtains for a home or an apartment? Examples: reuse, durability, and the cost of custom-made, constructed at home, or purchased ready-made. Discuss economical types of window treatments Examples: sheets and unbleached muslin.

Design a window treatment for a specific window style. Sketch the design and select fabric samples suitable for the window treatment and style. Compile the steps taken to plan your design. Write the steps in general statements to use as a guideline for selecting all window treatments. Share this information with the class. [NOTE TO TEACHER: To make the activity more realistic students could design window treatments for a specific budgeted amount. Write the budget allowance for the window treatment on slips of paper. Ask students to draw for their assignment.]

Complete a crossword puzzle to gain a better understanding of window treatments. Check your answers with classmates. [NOTE TO TEACHER: A crossword puzzle on window treatments is on Teaching Aid 84. Students may use selected references in determining the correct answers. Answers are: **ACROSS** 1. brackets, 2. padded, 3. cascade, 6. valance, 8. return, 10. ta, 12. shade, 13. opaque, 14. cornice, 17. install, 19. gather. **DOWN** 1. buckram, 2. pleat, 4. apron, 5. reverse, 7. lambrequin, 9. translucent, 11. frame, 15. Roman, 16. pull, 18. swag.]

5) Slipcovers and upholstery

Brainstorm to list items of furniture requiring slipcovers or upholstery. What properties are needed for slipcovers and upholstery fabrics? Examples: durable, comfortable to the touch, soil resistant, functional, easily cleaned, and economical.

Select fabrics suitable for slipcovers and upholstery. Find examples in fabric sample books, magazines, or catalogs. Show your fabrics in a report or display to the class. Discuss each report in class to see if the group agrees or disagrees with the selection of each fabric.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Work in small groups or individually to plan the furnishings for a family room. Consider the following factors: floor covering, wall covering, furniture, window treatments, slipcovers or upholstery, and accessories. Sketch the dimensions and furniture arrangement of a room on graph paper. Find samples of the floor covering, wall covering, upholstery fabrics, and window treatments you choose. Draw or find in magazines or catalogs the accessories used in the room. Place all the samples and the sketch of the room arrangement in a notebook or on a piece of poster board to present your work to the class. Be sure to consider the elements and principles of design. [NOTE TO TEACHER: Students could have specific budgets to use when planning the furnishings for the room.]
b. Floor coverings	View a filmstrip or read selected references to identify the types of floor coverings available. Describe various floor covering materials classified as soft or hard floor coverings. Examples: hard–brick, concrete, wood, resilient flooring, and ceramic tiles; soft–area rugs and indoor-outdoor, shag, or looped carpet. What is prefinished parquet floor covering? What are some of the characteristics of various floor coverings? Examples: durability, resiliency, cost, care required, composition, colors, patterns, sanitation, etc. Discuss the advantages and disadvantages of various floor coverings.
	Work in groups to determine factors influencing the selection of floor coverings. Examples: amount and distribution of traffic, exposure to dirt and moisture, availability of resources for upkeep, degree of individuality sought, character of the structure, degree of formality desired, room decor, energy saving needs, current trends, and the visual relation between floors, walls, ceiling, and room. Choose one type of floor covering and determine methods of judging the quality and how to measure the cost in relation to the upkeep required. Share your findings with the class. Use samples to help in your explanation.
	Survey magazines, community housing, and floor covering stores to discover recent trends in floor coverings used in housing. Are hard or soft floor coverings being used to a greater extent? Which hard floor coverings are used most often? which soft floor coverings? Which patterns of floor coverings are preferred? Predict reasons for the trends identified. Example: increased number of multi-role homemakers may have influenced the trend toward easy-care floor coverings. Discuss: Which floor covering trends emphasize functional characteristics? aesthetic characteristics? How much emphasis

should be placed on floor covering trends when selecting a product to meet the needs of a certain situation?

Interview a salesperson at a floor covering store to summarize procedures for measuring areas for floor coverings. Report on how to estimate measurements in preparation for shopping for floor coverings. Discuss the circumstances for a representative from the store to go to the home to make measurements.

Choose from sample books three floor coverings for a given situation. Explain how the color, texture, and pattern of each will affect other elements in the same room. Which covering would be easiest to care for according to its purpose? Which is the least expensive of your choices? Which is the most attractive to you? Taking these questions into consideration, determine which floor covering would be the best choice for the given situation. Give reasons for your choice. [NOTE TO TEACHER: Sample books of floor coverings can be obtained from your local decorating studio or floor covering specialty store.]

c. Furniture

Brainstorm to develop class definitions of *traditional* and *contemporary* as they relate to furniture. What style of furniture is predominant in your home?

View Teaching Aid 85 to identify various types of chairs in traditional and contemporary styles. Look through books and magazines to find other types of furniture styles. Discuss the importance of knowing the various types of furniture styles. Discuss the functional features of furniture. Are some furniture styles more functional than others? Explain. How may knowledge of furniture styles aid you in selecting new furniture? used furniture? antiques? How may it contribute to an understanding of adaptations of various styles? How may knowledge of the functional aspects of furniture affect selections?

View a filmstrip describing the characteristics of the various types of furniture styles. What characteristics have been carried over from past styles to present styles? What adaptations of past styles can you find? What changes were made to fit contemporary life styles? Discuss the size and type of furniture most appropriate for children, elderly, and handicapped persons.

Divide into small groups or work individually to predict the functions of living room furniture for a given case study situation. Choose a style of furniture to meet the needs of the individual(s) or family in the case study.

Justify your decision in an explanation of the problem and your solution to the class. [NOTE TO TEACHER: Possible case studies: married couple busy with three small children and careers; a middle-aged jet-set bachelor; an elderly couple who enjoy company; a person with a crippling disease or disorder such as arthritis, cerebral palsy, muscular dystrophy, etc., who lives alone; a newlywed couple with a limited income.]

Read selected references on the construction of furniture. Identify the various construction techniques used in furniture. What is the difference between case goods and upholstered goods? What are indicators of better qualities in case goods? in upholstered goods?

Listen to a guest speaker from a furniture store speak on furniture construction. Ask questions such as: What is the most important construction feature to look for when purchasing case goods? upholstered goods? What are the different types of wood finishes? upholstery finishes? What are some inexpensive, but quality, furniture choices?

Examine the construction of a piece of furniture by obtaining a used upholstered chair or sofa and disassembling it to study the various components. Identify the upholstered parts and the types of joints, springs, etc. Would you consider this a quality piece of furniture judged on its construction? Why? [NOTE TO TEACHER: Teaching Aid 86 will be helpful in identifying the construction components. Students may wish to draw a picture of the chair or sofa while disassembling it. Possible sources for the chair or sofa are: garage sales, junk shops, Goodwill stores, and donations from parents.]

Look through magazines or catalogs to identify and list space-saving and money-saving furniture. Discuss the need for such furniture. [NOTE TO TEACHER: Space-saving furniture includes: multi-function furniture, folding furniture, and modular furniture. Money-saving furniture includes: do-it-yourself furniture, remodeled furniture, unfinished furniture, and some types of outdoor furniture.]

Assume you are moving into an unfurnished one-room apartment or dorm room. You are only allowed to take three pieces of furniture with you when you move. What three furniture pieces would you choose to take with you? Remember, you must have a place to eat, sleep, entertain, store items, and study/work. Give reasons for your furniture choices and how each would be used. [NOTE TO TEACHER: An example of three

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	furniture pieces would be a couch which makes out into a bed, a trunk to store items which can also double as a coffee table or window seat, and a drop-leaf table which could also double as a desk for studying or working.]
	Read labels from various types of home furnishings. Discuss in class the various types of information found on the labels. What are other sources of information about home furnishings items? Why is it important to know the fiber content of the fabric on upholstered furniture? Are warranties used in furniture sales? What parts of furniture may be covered by warranties?
d. Accessories	Study selected references to define the term *accessories* as related to home furnishings. State the meaning of *functional accessories, decorative accessories,* and *objects of art.* Discuss the types of accessories used in the home. Examples: pictures, lamps, mirrors, pillows, books, plants, clocks, and table top accessories. Discuss the factors that affect the selection of accessories. Describe how these factors influence the selection of accessories. Give examples of accessories for which care required may out-weigh the enjoyment gained from them. Discuss how accessories may become outgrown or outmoded.
e. Equipment	View filmstrips to identify the variety of household equipment available. Examples: refrigerators, freezers, dishwashers, ranges, microwave ovens, trash compactors, food disposers, washer and dryer, water softening and purifying equipment, cooling equipment, and heating equipment. Discuss ways equipment needs may be estimated. Consider such factors as environment, family composition, housing location, income, and employment. Discuss kinds of electrical and gas equipment used in the home. Explain reasons for choosing gas equipment. Explain reasons for choosing electric equipment. Discuss the energy saving features of various household equipment. What kinds of equipment may be included with the sale or rental of a housing unit?
	Read labels from various types of household equipment. Cite types of information included on each label. Which federal agency controls labeling?
	Visit a business that sells household equipment. Examine label information on equipment. Is all equipment labeled? If there is no label, is there an instruction book? What are other sources of information about the product? Describe labels found on household equipment. Write a short report about your findings and present to the class.

CONCEPTS **LEARNING AND EVALUATION EXPERIENCES**

Work in groups or individually to answer the following questions: What would happen if labels were removed from all equipment on the market? What are the advantages and disadvantages of labels? Are labels influenced by outside factors? Explain.

Define *seal of approval, warranty,* and *guarantee.* Why are the terms "warranty" and "guarantee" often use interchangeably? What are some seals of approval you often see on household equipment?

Examine a warranty (or guarantee) from any piece of household equipment. How long is the warranty in force? Are all parts of the equipment under warranty for the same length of time? What is the buyer's first obligation in fulfilling the terms of the warranty?

Demonstrate through role play the usefulness of a warranty in a given situation. Example: a refrigerator which quits working while the warranty is still in force. What is the importance of comparing warranties before purchasing an item? What is the importance of understanding all aspects of the warranty? Why should one read and save warranties and instruction booklets after an item is purchased? Discuss the development of a good system, such as a filing system, for saving all information on an item after it is purchased.

Read selected references on household equipment. Point out key features indicating quality of home equipment. Examples: design, construction, function, safety, and care. Analyze situations to determine the quality and price suitable for equipment to meet the needs of an individual or family. When may it not be wise to purchase maximum quality?

Work in groups to list on butcher paper the factors affecting the quality and price of equipment purchased by an individual or a family. Examples: resources, values, goals, standards, needs, and wants. Compile a class list. Explain how each factor influences purchases in specific situations.

Discover the relationship between quality and price by observing two similar household items. Which item is superior in quality? higher in price? What is the relationship between quality and price for these two items? Debate the following statement: "You get what you pay for." What are some instances where you might get more than you pay for?

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

Divide into small groups or work individually to develop a check list for major appliances used in the home. Compare the size, features, and price of an appliance. Report your findings to the class. [NOTE TO TEACHER: Check lists are located in current textbooks and in *Consumer Reports* magazine.]

Discuss hidden costs to consider when purchasing a household item. Examples: Will the initial cost include additional wiring or plumbing? Will there be an installation charge? Will there be a delivery charge?

Study references to identify cooling needs in different climates in various parts of the world. Describe various methods of air conditioning. Discuss the advantages and disadvantages of each type. Discuss how the homeowner can control the cooling system for efficiency of operation and conservation of energy.

Listen to a resource person from a local air conditioning business describe an adequate air conditioning system for specific housing. What is the approximate cost of installing and operating this system? Why is the size of an air conditioner important? What happens when the air conditioner unit is too small? too large? Explain the purpose of ceiling fans and attic fans. Define *Btu*. What is meant by the Btu's of an air conditioner? Use the information on Teaching Aid 87 to compute the size of an air conditioner needed to cool a specific house or room. Determine the energy efficiency ratio of the air conditioner.

Brainstorm to list heating needs in various climates. Discuss the types of fuel and heating methods used in heating homes in your community and in various parts of the world. Make a chart listing the type of fuel, heating method, and advantages and disadvantages of each method. Examples: type of fuel–electricity; type of heating method–forced air central heating system; advantages–clean, can be regulated; disadvantage–expensive. What alternative means of heating may be available if your supply of fuel is inadequate or depleted?

Listen to a resource person from a local home heating firm discuss the following: ways and means of controlling heat in the home, annual estimated cost of heating the home by particular types of fuel, and advantages and disadvantages of different types of heating systems.

Define terms related to electrical equipment in the home. Example: *circuit, amperes, volts, watts,* and *fuse*. Discuss the definitions with classmates.

View Teaching Aid 88 to identify electrical symbols shown on blueprints which indicate wiring (outlets and switches). Discuss the advantages of being able to read the wiring symbols on a blueprint.

Complete a work sheet by identifying the electrical wiring symbols illustrated on a floor plan. [NOTE TO TEACHER: Teaching Aid 89 can be duplicated for a student work sheet. Answers are: 1) exhaust fan, 2) telephone, 3) clock, 4) 220 V. duplex outlet, 5) switch, 6) wall light or sconce, 7) ceiling light, 8) television outlet, 9) 115 V. duplex outlet, 10) weatherproof outlet.]

Listen to a resource person discuss adequate wiring and safety regulations and codes in your community. List some signs of inadequacy. Discuss examples of planning wiring according to the total square feet in the dwelling and the amount of electrical equipment in the dwelling. Identify requirements for household wiring such as the size of service entrance; the number, use, and placement of circuits and convenience outlets; the lighting and switching system; exterior lighting and outlets; and provision for increased electrical needs.

Work in pairs to show where to place convenience outlets and switches on a floor plan. Relate the number of circuits to the total wattage needed by the specific plan. Present the plan to classmates.

Study references in order to define minimum plumbing needs in today's housing. List specific needs such as water and gas supply, sewage disposal, and space for bathroom facilities. Share your findings with classmates.

Explain factors to consider when planning or evaluating plumbing needs. Obtain specific information concerning the plumbing code in your city. Discuss findings in class. Discuss the minimum requirements in planning a bathroom. Study plumbing layouts from blueprints to illustrate adjacent, vertical, and rambling plumbing layouts.

Relate plumbing costs to arrangement and materials. Find examples of plans in which the plumbing has been planned to minimize building costs and maximize efficiency. Discuss the desirable features of the plans. Show use of the materials available for plumbing, such as copper, cast iron, ceramic tile, lead, and plastic pipes. Samples of the materials may be obtained from a local plumber or builder. What is the cost per unit of each of the materials? What are the advantages and disadvantages of each?

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

f. Lighting

Read selected references to gain an understanding of lighting needs for the home. Consider such factors as tasks to be performed, safety, energy saving features, decoration, and prevention of eye fatigue. What part does quality and quantity play in the function of lighting? How can inadequate lighting cause eye strain? Define *footcandle.* Discuss the light meter as the device used for measuring footcandles. Describe factors that vary the number of footcandles in any room or special area. Consider factors such as location and direction of light sources, reflective qualities of colors and textures, number of sources, and wattage of bulbs or tubes.

Brainstorm to list sources of light in various areas of the home. Sources include architectural lighting, fixtures, lamps, candles, fireplace, and natural light. What are possible uses of each light source? Name the major sources of artificial light. Major sources are incandescent bulbs and fluorescent tubes. How do lighted incandescent bulbs and fluorescent tubes differ? What are the advantages and disadvantages of each?

View Teaching Aid 90 to identify the types of lighting. Define *general, direct,* and *indirect lighting.* List sources of direct and indirect lighting. Examples: ceiling fixtures and open-top portable lamps. What are the purposes of general lighting? What are possible effects of inadequate general lighting? Discuss the types of diffusers. Name the methods of diffusing light. Examples: frosted bulbs, diffusion bowls, and translucent lamp shades. For what tasks are general lighting necessary? How can the source of a room's lighting affect the decor? What light bulbs used in general lighting are not flattering to a person's skin? Why?

Brainstorm to define and list sources of specific lighting. Sources of specific lighting include floor lamps, suspended-fixture lamps, and high intensity lamps. What are the purposes of specific lighting? What factors need to be considered when planning specific lighting? Factors might include source and amount of other light available, tasks to be performed in area, beauty, and cost of various kinds of specific light. What tasks require specific lighting?

Compare light from several different sources such as a frosted bulb, a colored bulb, a cool white fluorescent tube, and warm white fluorescent tube. Place the lights so you can compare the light from the bulbs and tubes to sunlight. How do they compare? Do all the bulbs and tubes have the same color of light? Shine all lights on a white surface and then on a colored surface. What differences are apparent on the white surface? the colored

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	surface? Why? What is the purpose of a dimmer switch? How does it control the light in a room?
2. Shopping plans	Brainstorm to list immediate and long-term considerations in planning for the selection of home furnishings and equipment. Discuss the relationship between immediate and long-term plans. How are they similar? different? Give examples of each. How may immediate plans be part of long-term plans? How will family needs affect shopping plans? How do plans for furnishing and equipping a home help families realize goals? Compare a long-range shopping plan with an immediate shopping plan. For each plan, determine problems, values, and projected outcomes of different solutions. Explain final choices. Divide into groups or work individually to determine possible immediate and long-term plans for obtaining home furnishings for specific case studies. [NOTE TO TEACHER: Examples of case studies: two friends moving into an unfurnished apartment and away from home for the first time; a young married couple who has just bought a two-bedroom house; a married couple, expecting their first child, moving into a three-bedroom rental house; a woman, recently divorced who lives in an unfurnished two-bedroom town house with her two teenage boys; an elderly couple who sold their large home and all its furnishings and moved to a small apartment in a retirement village; an adult living alone.]
3. Buying guidelines	View Teaching Aid 91 to identify some buying guidelines for home furnishings. What are some other buying guidelines? Are there exceptions to these guidelines? If yes, give examples. Explain. List questions to consider in buying home furnishings and equipment. Examples: Will the item meet the purpose for which it is intended? Is the size appropriate for the family? What care is required? Is the quality related to its proposed use and to the life style of the family? Is durability necessary? Is special installation required? Will the item fit the space available? Is the item compatible with other furnishings? Is it in the price range of the budget?
4. Comparative shopping	Brainstorm to list guidelines for comparative shopping. Examples: shop several stores; ask questions; look at prices, quality, features, warranties, and labels; inquire about installation, delivery, credit, and service charges. Why is it important to do comparative shopping? How

does it increase the possibility of making a satisfactory purchase?

Construct a bulletin board of shopping tips. Examples: ask questions when you do not have answers; consider cost or your budget is lost; plan before you shop, shop before you buy. Show the usefulness of these tips in shopping situations. Discuss the advantages and disadvantages of comparative shopping.

Visit or call a variety of stores selling new, used, or unfinished furniture. Compare the price, quality, construction, care, warranties, etc. of one type of home furnishing or equipment. From which store would you make your purchase? Why? Where else could you find used furniture besides a store? What are some of the advantages of buying used or unfinished furniture instead of new furniture? What are the disadvantages?

COMPETENCY: *Ability to analyze factors influencing home maintenance responsibilities and operating costs*

SUB-COMPETENCIES: *Operate and maintain a home efficiently.*

Summarize routine and occasional home care tasks.

Determine community and family responsibility of home care and maintenance tasks.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
E. Home Maintenance 1. Operating costs a. Housing	Study references or interview parents or other homeowners to discover factors related to the operation and maintenance of housing. Estimate the costs related to these factors in various types of housing. Discuss how the proper use and care of the home, its furnishings, and equipment will reduce maintenance and repair costs. Work with your family to find ways to reduce home operating and maintenance costs. Examples: making regular checks of equipment, following manufacturers' instructions in use of equipment, cleaning regularly, and painting and repairing as needed. Put some of your suggestions into practice. Present your plan for minimizing home operating and maintenance costs to the class.
b. Energy conservation	Define *energy conservation.* Explain how consuming a minimum amount of energy allows maximum use of available energy without unnecessary waste. What is meant by energy efficient housing? Give examples. Predict how energy conservation will affect future housing. Will future homes be larger or smaller? Explain. How has housing been affected by energy conservation in the last seven years? Discuss energy conservation features that consumers look for in housing. Listen to a resource person discuss the possible effects of energy conservation on the operating costs of housing. What types of heating alternatives will be used in future housing? Discuss features consumers now expect to find in housing such as: minimum number of windows, strategically placed; fluorescent lighting in large work areas, bathrooms, laundry room, basement, kitchen, hallways, stairways, recreation rooms or large rooms where diffused light is required; roof overhang on the south; adequate attic, ceiling, or top floor insulation; storm doors, storm windows, caulking, and weather stripping. How will these features affect the operating costs of housing? Discuss ways to make an existing home more energy efficient. Examples: installing storm windows or taping clear plastic film to the inside of window frames; installing vents and/or automatic fans in attic; adding insulation; caulking and/or weather stripping windows,

doors, and around pipes, and other openings. Does the color of the roof have an effect on the amount of heat gain in the house? Explain.

c. Furnishings and equipment

Brainstorm to name and list basic home furnishings and equipment needed for a first home. Use catalogs to identify price ranges for the basic furnishings and equipment listed. Cite factors that may affect the life expectancy of various items of furnishings and equipment. How can an understanding of the financial aspects of selecting furnishings and equipment contribute to wiser use of money and increased satisfaction with purchases? Discuss the advantages and disadvantages of buying home furnishings and equipment secondhand at garage sales or flea markets, or using discards of relatives and friends.

Give examples of factors which may influence the portion of family income to be spent on furnishings and equipment. Examples: amount of income, personal credit, stage in family life cycle, values, other financial responsibilities, and number of family members.

Divide into small groups to figure the costs of financing the purchase of $2,000 of furnishings and equipment for a newlywed couple moving to an unfurnished apartment with range, refrigerator, and draperies provided. Each group will be assigned one of the following credit sources: department or furniture store, finance company, full-service bank, credit union. Someone from each group should contact a local representative of the assigned credit source for current information on figuring the finance costs. Compare the groups' findings in class. [NOTE TO TEACHER: Students should list furnishings and equipment needed to establish a first home and compute the cost of obtaining the items. If $2,000 is not sufficient for obtaining the items all at once, students will need to find ways to reduce the cost per item, consider multipurpose furniture, substitute less expensive items, or delay purchase of some items. Students can share ideas with classmates.]

2. Maintenance costs
   a. Money-saving methods

Illustrate various "do-it-yourself" home furnishings projects from pictures in magazines or from personal experience. [NOTE TO TEACHER: Students might bring to class examples of "do-it-yourself" projects they or members of their families have completed.] What skills may be useful in "do-it-yourself" home furnishings projects? Estimate cost, time, and energy required in each project. Discuss why the feasibility of "do-it-yourself" projects depends on the skills, tools, equipment, time, and energy available.

CONCEPTS | **LEARNING AND EVALUATION EXPERIENCES**

Predict the cost of specific furniture remodeling projects. Compute the cost of remodeling a piece of furniture by preparing a list of the expenses anticipated in doing the project. Obtain needed information by talking with salespeople in hobby shops or hardware stores, with acquaintances who remodel furniture as a leisure time activity, with cabinetmakers or carpenters, or by studying appropriate references. What energy saving techniques can be utilized in furniture remodeling projects?

List simple furniture repairs which may be made at home such as gluing a broken chair leg or patching a hole in upholstery. Discuss how money may be saved by making simple repairs at home. Discuss situations where it would be best to hire someone to do repairs. Why may some home repair projects not lead to a savings?

Study references and conduct interviews to learn procedures for making the repairs listed for the activity above. Explain to the class the steps in making one specific repair. [NOTE TO TEACHER: Students might complete repairs on a piece of furniture at home. In a report to the class students can describe the completed project, including steps involved and time and money spent. They might also interview a professional furniture repairperson to discover the cost of having the simple repair done professionally, compute the amount of money saved, and include the information in the report to the class.]

b. Renovation and remodeling

Brainstorm to identify types of renovation and remodeling. Classify as installation of new materials and equipment, rearrangement of space inside the house, or addition of new rooms. Discuss how renovation and remodeling can bring the housing unit up-to-date.

Interview a home remodeling consultant to obtain examples of the costs of different types of renovation and remodeling projects. Share your findings with classmates.

Listen as a person who has recently remodeled a home explains the costs of remodeling. How did cost affect the person's decision to remodel the home? What other factors were involved in the decision to remodel?

Interview a realtor to find out what types of renovation and remodeling projects increase the resale value of housing and which do not. How may this information influence decisions about renovating and remodeling housing?

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Examine remodeling ideas found in magazines or other reference materials. Choose one remodeling plan. Consider time, money, skills, and other resources to point out the feasibility and determine the costs involved in the remodeling plan. Would the expense of this project be justified by the satisfaction received? by an increase in resale value? Share the plan and your conclusions about expense and satisfaction with the class. Discuss how the plan could be modified to meet the needs of handicapped and elderly family members.
c. Home repairs	Brainstorm to list housing repairs. What equipment may be needed to make repairs? Discuss how home repairs are a necessary part of home maintenance. Describe home repairs that you have helped make. What other home repairs are frequently necessary? Which of these may be do-it-yourself repairs? Discuss the effects of negligence in home repairs. Describe factors to consider before making home repairs. Examples: cost; tools, skills, and time required; whether to do-it-yourself or contract the job.
	Work in pairs to show the class how to make selected home repairs. Examples: replace the washer in a leaky faucet, clear a clogged drain, adjust a gas pilot, repair a screen or window shade, and drive a nail.
	Analyze given home repair projects. Determine the cost of doing-it-yourself and having it contracted. Is money the only resource expenditure to be considered? Why?
d. Yard care	Select pictures of housing with well-planned landscaping and housing in need of yard care to discuss with classmates. Include examples representative of middle and low income levels. Discuss the importance of yard care. What are the characteristics of a well-planned yard? Discuss how attractive landscaping and consistent upkeep contributes to the beauty of the home and the neighborhood, the value of the home, and the enjoyment derived from it.
	Describe possible reasons for poorly kept yards. Suggest alternatives for people who lack interest, skill, or money to care for yards. Examples: rock gardens, apartment living, container gardening for vegetables or flowers, and cement play areas. Give examples of care necessary for yards. Discuss weekly and occasional yard care tasks.
	Survey a home to find examples of yard care equipment. Describe other types of commonly used yard care items. Relate yard care equipment needed to styles of landscaping. Share findings with classmates.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Listen to a resource person from a nursery, garden center, or the extension office show procedures for lawn care. Include fertilizing, watering, mowing, and weed control. Describe factors to consider when selecting grass. Examples: soil, temperature, annual rainfall, and care required.
	Discover through selected pamphlets and resources easy yard care projects. Discuss the yard care projects with classmates. Which yard care projects might be adapted for a specific outdoor area with which you are familiar? [NOTE TO TEACHER: Students might carry out a yard care project at home. They can describe the project in a report to the class and explain the new procedures learned. Students can also start plants in cans at school using seeds or cuttings. These plants could be used later in home or school beautification projects.]
e. Routine care	Define *routine care of housing.* Name tasks included in routine care. Make a class list. Are these tasks performed on a regular basis? How may routine care required in a house, an apartment, a town house and a mobile home differ? What care is required by all types of housing?
	Study resources to identify factors which may influence the routine care of housing. Examples: standards, type and quality of furnishings, skills, living patterns, and available equipment. Explain how each factor may affect routine care.
	Interview homemakers to discover suggestions for routine care of a home. Share ways of planning routine care. Prepare a schedule for routine care which may provide efficiency and satisfaction. How may routine care be accomplished without monotony?
	Predict changes in routines of family members in caring for the home when a full-time homemaker goes to work outside the home. How may other employed family members, young children, and teenagers, contribute to routine care?
	Point out the importance of home maintenance. Discuss how order and beauty in the home influences physical, mental, and emotional health. Determine your reactions to extremes of orderliness in an environment. Cite ways home maintenance extremes may influence physical, mental, and emotional health.
	Complete the following statements in reference to routine care of the home: "When parents work, children should . . . ." "If a gainfully employed parent stops work,

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	the rest of the family . . . ." How do the ways in which individual class members complete the statements reflect their values and attitudes toward routine care of the home?
f. Occasional care	Brainstorm to identify occasional household tasks. Examples: cleaning windows, shampooing carpets, and repainting. Summarize procedures for an occasional do-it-yourself home maintenance task such as painting or carpet cleaning. What alternative solutions for completion of the task may the family choose? What are advantages and disadvantages of each solution? Investigate the cost of hiring professional help for occasional care jobs, such as window washing or carpet cleaning. Report findings to the class. Investigate various alternatives suitable for occasional care tasks. Study pamphlets, books, and magazines to learn correct methods for various procedures. How may product labels be of value in determining methods of use? Demonstrate the correct use of procedures and equipment for specific tasks. Study the results of each method used. Determine which method is most satisfactory for each task. Consider time and energy as well as costs involved.
g. Community responsibility	Listen to a city park engineer explain restrictions applicable to home care and maintenance. Discuss the importance of accepting responsibility for community improvement. Are home care and maintenance the responsibility of all community members? How may community members work to improve neighborhoods? Survey your community by taking a walking tour. Report the location and nature of improvements being made in your community. Describe other improvements that have recently been made. Associate specific community improvements, such as landscaped boulevards, parks, and street lights, with benefits you personally receive from them. Describe improvements which need to be made in your community. Find out if there are any plans for the improvements and how they will be carried out. How may you help? Share findings with classmates. [NOTE TO TEACHER: For an FHA/HERO community activity, students might prepare a project to improve the school or community. Examples: sponsor a cleanup day; collect cans from roadways or plant flower seeds; landscape a public area, or plant and care for red roses near the home economics department as an FHA/HERO project.]

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
h. Family responsibility	Study references to learn who is most frequently responsible for given tasks in the home. How does your family differ from this pattern? Why? List factors which may influence who is responsible for given tasks in the home. Examples: family composition, resources, values, and goals. Discuss the following questions: How is the age of family members who share in routine care related to their level of skill? How may the size of the family influence routine care? How may the number of rooms influence routine care? What other factors may influence routine care? What other factors may influence who is responsible for certain tasks? Examples: outside employment or money available for cleaning supplies, equipment, and services. Give examples to illustrate each question posed. Discuss how men's and women's roles in assuming responsibility in the home have changed in this century. Describe jobs done around the home by your father, uncles, or brothers that your grandfather has never done. Discuss the effects on family life style as the family has changed from a producing to a consuming unit. Point out ways in which leadership in care of the home affects the attitudes of children. How may pride and satisfaction be created from a job well done? Determine the benefits various family members derive from all members sharing in home maintenance. Examples: increased leisure time and less fatigue. Work with your family to develop a one-month plan for sharing home maintenance responsibilities. Work together to follow the plan. Report the results to class members.

COMPETENCY: *Ability to analyze career and job opportunities related to housing, home furnishings, and equipment.*

SUB-COMPETENCIES: *Examine job and career opportunities related to housing, home furnishings, and equipment.*

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
F. Starting a Business Related to Housing, Home Furnishings, and Equipment 1. Types of businesses	Brainstorm to identify types of businesses an entrepreneur might consider which are related to housing, home furnishings, and equipment. Examples: draperies, accessories, paint, furniture refinishing, upholstering, retail sales, interior design. Look in the yellow pages of your phone book to identify such businesses in your community.
2. Facilities a. Space	Conduct a survey of your community to determine the number of businesses related to housing, home furnishings, and equipment. Look at a city map to find the areas zoned for business. Discuss any of the businesses which might be located in the home. [NOTE TO TEACHER: Students might get additional information from the Chamber of Commerce.] Drive by the exteriors of housing, home furnishings and equipment businesses. Examine the location of each. List the environmental factors which might contribute to the establishment's success or failure. [NOTE TO TEACHER: Factors should include traffic, parking, visibility from street, attractiveness, and presence or absence of similar operations and potential customers.]
b. Equipment	Use resources in the library or visit a business related to housing, home furnishings, and equipment. Prepare a report on the equipment, facilities, and other needs of the business. Include information on equipment that is essential; equipment that would be "nice to have"; types; prices; features; etc. of various types of equipment used. Determine the availability of used equipment. Compare the cost and quality of new and used equipment. Present the report to class and compare the requirements of each business. [NOTE TO TEACHER: Assign each student (or team of students) to report on a different housing, home furnishings or equipment business.] Listen as a panel of entrepreneurs representing businesses related to housing, home furnishings, and equipment discuss the importance of planning, equipment and supplies, and storage, work and sales areas. [NOTE TO TEACHER: On the panel include an entrepreneur who operates a business in the home. Example: entrepreneur with an upholstery or drapery business.] How does the viewpoint vary from panel member to panel member? Discuss how needed equipment and space will vary from business to

CONCEPTS	LEARNING AND EVAULATION EXPERIENCES
	business. What is the relationship of efficiency and well planned space? How can a good store layout eliminate wasted movement and time? What are the advantages and disadvantages of operating a business out of the home? How does city zoning affect the entrepreneur with a business operating from a home?
3. Business Procedures	Ask an entrepreneur of the type of housing, home furnishings or equipment business you are interested in to show you the types of financial records kept in the business. Ask the entrepreneur to explain the various parts of the forms he or she uses. If possible, obtain copies of the forms. Compare the forms to forms used by entrepreneurs of other housing, home furnishings and equipment businesses. What forms are peculiar to the particular type of housing, home furnshings, and equipment business? Make copies of the forms obtained in the previous exercise. Use sample figures for practice in completing balance sheets, profit and loss statements, and break-even analyses. Listen to a representative from the Internal Revenue Service or Small Business Administration explain the importance of careful record-keeping in small business operations. What records are necessary for tax purposes? What is meant by an employee earnings record? the payroll register, W-2 form? the federal income tax withholding schedule? the Social Security employee tax table? Select one routine procedure, (such as measuring a window, marking merchandise, etc.) that might take place in a housing, home furnishings, and equipment business of the type that interest you. Develop a flow chart for completing the procedure using the time and fatigue efficiency techniques you have learned. Present the flow chart to class. What forms, if any, might be used?

SEMESTER COURSE

HOUSING, HOME FURNISHINGS, AND EQUIPMENT
SEMESTER COURSE

COMPETENCY: *Ability to analyze the interrelatedness of the various factors affecting housing for individuals and families*

SUB-COMPETENCIES: *Determine functions of housing.*

Analyze the influence of housing on individuals and families.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
I. Functions of Housing A. Physiological, psychological, and sociological	View Teaching Aid 49 to identify the functions of housing. Have the functions of housing changed through the ages? Explain. Discuss how energy conservation may affect the functions of housing. View Teaching Aid 50 to identify how housing meets the physiological, psychological, and sociological needs of a family. Define family. Include all changing family forms in your definition such as single parent families, two parent families, remarriage families, etc. Discuss how housing meets each of these needs for the various family forms.
B. Headquarters	Describe ways housing provides headquarters for individuals and families. Share with classmates your definition of *headquarters* as related to housing. Read case studies describing individual and family situations. Examples: nomad, traveling salesperson, stationary family with children, single person, newly married couple. What needs should be met in the housing headquarters in each case study? Discuss housing characteristics suitable for each situation. Interpret the meaning of the saying: "Home is where the heart is." Discuss the function of the home as headquarters in today's society. Interview several persons to discover how their childhood homes were used as headquarters. Share the information with classmates. Summarize ways in which your home serves as headquarters for members of your family. Discuss how the function of the home as headquarters may change in the future.
C. Protection	Explain ways housing provides protection. Divide into teams of two. Alternate team positions after each round. One person identifies a need for housing protection; the other suggests aspects of housing that provide the needed protection. For example, the need may be protection from cold winter weather; the protection may be insulated walls and an adequate heating system. Relate the protection needs of the past to the protection needs of the present. Show how the protection provided

by housing in other cultures may be different from that provided in the United States. How much of the protection provided by today's housing is psychological?

D. Privacy

Identify ways housing may provide privacy in the following situations: a bedroom shared by two sisters, a date with one's fiance when several younger children are home, a reading area located in a room simultaneously used by other family members. What role does privacy play in a person's emotional well-being?

Observe pictures of different types and prices of housing. Discuss the ways that each type of housing may afford privacy for its occupants.

On a floor plan, point out areas that afford privacy. [NOTE TO TEACHER: Teaching Aid 58 is a suitable floor plan to use for this activity.] Describe a family for which this floor plan may be suited. Determine a time during the day that each room in the floor plan may afford privacy for a family member. [NOTE TO TEACHER: Provide students with floor plans of various types of housing: studio apartment, one-room efficiency apartment, duplex, mobile home, and one and two bedroom homes. Ask students to determine privacy areas of each floor plan for individuals and families.]

Reorganize specific housing to provide privacy for individuals and families. Describe a family. Include number of family members and age, sex, interests, and scheduled activities of each member. Modify a floor plan to provide greater privacy for each family member described. Examples: relocating doors and windows; adding ways to cut down noise; or using screens, dividers, and plants. [NOTE TO TEACHER: Floor plans on Teaching Aids 60-62 can be used for this activity. Students could also analyze the privacy provided in their own homes or in sample floor plans of various types of housing. If additional privacy is needed in their own home, they could work with other family members to propose possible solutions. They could carry out the plans if possible and summarize results in a written report.]

E. Self-expression

Give examples of ways individuals express themselves through housing. Look at pictures or cartoons of various kinds of housing. Describe ways the personalities and interests of the occupants are expressed. Discuss how housing provides a medium for self-expression.

Participate in a field trip to several homes in the community. Discuss ways the personalities and interests of the occupants were expressed. [NOTE TO TEACHER:

If a field trip is not possible, students could report on the personalities and interests expressed in housing on TV shows.]

Design or redecorate a room or area to express more fully your personality and interests. Present to the class a sketch of the plan and explain how the redecorated room or area expresses your interests and personality.

F. Health and safety

Brainstorm to identify aspects of housing that affect health and safety. Examples: temperature regulation, lighting, and ventilation. How does housing provide for health and safety?

Study books and bulletins to recognize various health and safety hazards in the home. Draw cartoons identifying unsafe conditions often found in homes. Examples: frayed electric cords, loose matches, and oily rags. Discuss preventive measures to eliminate health and safety hazards in the home.

Conduct a survey to find health and safety hazards in the home. Explain ways to eliminate each hazard you find. Use a class-prepared list of common safety hazards to locate the health and safety hazards in the home.

Devise a fire escape plan to use in your home in case of fire. Include a backup plan in case fire blocks the main exit. Conduct a practice escape drill with your family, instructing each family member how to get outside from the various rooms and where to meet.

Prepare a bulletin board using pictures, sketches, or cartoons depicting safe practices in the home. Suggested title: "Rx for Safety."

G. Physical

Identify physical conditions in housing which affect the well-being of individuals. How may temperature affect an individual's performance level? What is the relationship between temperature and humidity? At what temperatures is the humidity more apparent? Why? How may the comfort of an individual be affected by air movement and ventilation?

Observe a demonstration on how to check an environment for humidity. [NOTE TO TEACHER: For the demonstration, room temperature should be 72° to 75°. Avoid giving the demonstration in the kitchen area because cooking vapors have a tendency to raise the humidity. Place three ice cubes in a glass; add water and stir. Humidification is needed if moisture does not form on the outside of the glass in three minutes. Encourage students to try the experiment in a room at

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

home.] Discuss humidity and other environmental characteristics in the home economics department which affect physical well-being.

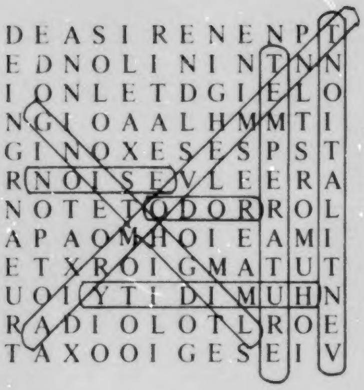
Listen to a resource person discuss the importance of proper lighting in the home. How is the quality of light affected by the size and type of bulb, height and location of light source, and the structural design of the light source?

Summarize ways an individual may be affected by noise or odors in the home. How may the enjoyment of such activities as reading, resting, or listening to the stereo be affected by noise from appliances, plumbing, or other sources? How may similar activities be affected by unpleasant odors or fumes?

Work in small groups to discover ways that physical conditions in housing may be controlled. Examples: range vents, dehumidifier, acoustical tile, fluorescent lighting, thermostatic temperature controls, and cross ventilation. How does controlling physical conditions affect energy conservation? Report your findings to the class. [NOTE TO TEACHER: For FHA/HERO, students can volunteer to take turns being responsible for the physical environment of the meeting room for a period of time by arranging tables and chairs, adjusting temperature and lighting, etc.]

Point out ways physical conditions in housing are controlled in your home economics department. Determine the effects these conditions have on class members. Discuss feasible ways of improving physical conditions in the classroom. [NOTE TO TEACHER: Students could analyze how physical conditions in their homes contribute to the family's health and safety and how the home's physical environment might be improved.]

Complete a seek-and-find puzzle to summarize the physical conditions in housing which affect the well-being of family members. The terms in the puzzle are spelled diagonally, horizontally, vertically, or backwards. To check your puzzle answers, take turns reading the terms and explaining their effects on the physical well-being of individuals. [NOTE TO TEACHER: Use Teaching Aid 92. Answers are circled on the puzzle to the left.]



D E A S I R E N E N P T
E D N O L I N I N T N N
I O N L E T D G I E L O
N G I O A A L H M M T I
G I N O X E S E S P S T
R N O I S E V L E E R A
N O T E T O D O R R O L
A P A O M H O I E A M I
E T X R O I G M A T U T
U O I Y T I D I M U H N
R A D I O L O T L R O E
T A X O O I G E S E I V

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
H. Psychological	Study selected references to identify the psychological needs of individuals. Make a list of the psychological needs to share with the class. Discuss how the psychological well-being of individuals can be influenced by the physical characteristics of a room. Discuss physical characteristics of a room that may affect one's psychological well-being. Examples: color, lighting, room arrangement, organization, size of furnishings, and accessories. Describe the psychological influence of a room. Select a picture of a room you like and one that you do not like. What mood does each room express? Describe factors that influence the mood expressed by each room. How would living in this room affect you psychologically? Would the physical appearance of the room help to eliminate fatigue? Explain. Work in pairs to discover the psychological feelings stimulated by various physical characteristics of rooms. One person states a specific room characteristic; the partner responds by describing how the characteristic makes the person feel. Examples: clutter (confusion), red (excitement), and darkness (depression). Share reactions with the class to predict common feelings aroused by specific physical characteristics of rooms. Discuss physical characteristics in a given room that may cause psychological fatigue. Analyze the psychological effect of an area in your home. Make a list of inexpensive ways to improve the psychological atmosphere of the area. Carry out one or more of your suggestions and discuss the results with the class.
I. Social	Brainstorm to name ways housing influences an individual's social development. Discuss how an individual's personal values may be influenced by housing. Explain influences of housing on social development of the family. Compare illustrations of different sizes and types of housing. What effects might each have on the social development of the family? View pictures of rooms, floor plans, and exteriors of homes. Describe the probable activities of family members in each home. How may housing influence the activities of family members? Discuss the effect of various neighborhoods on friendship patterns, social activities, and civic responsibilities. Determine ways housing affects self image or provides status. React in a few words to the following quotation

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	by Benjamin Franklin: "The eyes of other people are the eyes that ruin us. If all but myself were blind, I should want neither fine clothes, fine house, nor fine furniture." Do you feel a strong emotion about the statement? What is it? Why do you feel this way? What pleasures do you have which have nothing to do with making an impression on somebody else? Find advertisements which emphasize that housing may be a status symbol for some people. Point out how an individual or family may receive status from living in various forms of housing.
J. Emotional	Brainstorm to list ways housing affects the emotional well-being of individuals in a family. Examples: providing privacy, allowing space for activities and hobbies, and fostering independence. Discuss the possible emotional effects on individuals and families when housing has crowded, cluttered, and unkempt rooms. What are your reactions to the housing conditions described? Discuss the emotional effects of other housing conditons.
K. Intellectual	Summarize ways housing may foster intellectual growth. Work in small groups to give examples of physical housing characteristics that may foster intellectual development. Examples: lighting, furnishings, accessories, and color schemes. Describe ways physical housing characteristics may affect intellectual development of family members. Share the information with other groups. Role play to portray specific housing problems related to the intellectual development of various family members. As a class, discuss possible improvements for each situation. Conduct an instant replay to show the usefulness of each suggestion. Examples of housing problems: no provision for a quiet study area, inadequate lighting, and a drably decorated room. Work individually or in small groups to plan a family room or living room which supports and encourages intellectual pursuits of a given family. Point out characteristics which do and do not affect intellectual growth. Is there space for exploration, meditation, and development of skills? Present the plan to class members. Determine whether the plans presented are realistic for the specific families. Develop a plan to organize, decorate, or rearrange a study area. Propose inexpensive ways to improve your study area to make it more intellectually stimulating. Include ideas to make it more attractive, more convenient, more organized, and more conducive to study. Present

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	the ideas to the class. If possible, carry out the ideas, live with the improved study area for a week, and present an evaluation of the improved study area to the class. Tell how the new arrangement is working, if you are happy with the area, and if further organization or rearrangement is needed.
L. Economic	Cite major costs in providing family housing. Examples: rent or house payment, utilities, maintenance, insurance, and taxes. Discuss how a family's economic situation affects their ability to satisfy their housing needs and wants. Give examples of ways housing needs can be met when families have space and money limitations. Give examples of economic changes that affect housing. Examples: increase or decrease in family income, addition of a child to the family, inheritance, depression, or wage freeze. Discuss economic conditions of the past ten years that have influenced housing. Interview a home builder, real estate person, person employed in a bank or money lending institution, or other persons in the community to gain a better understanding of the influences of economic change on housing. Share your findings with the class.

COMPETENCY: *Ability to determine the factors influencing housing and home furnishings decisions*

SUB-COMPETENCIES: *Describe human factors influencing housing and home furnishings decisions.*

Identify environmental factors influencing housing and home furnishings decisions.

Identify special requirements influencing housing and home furnishings decisions.

CONCEPTS

II. Factors Influencing Housing and Home Furnishings Decisions
  A. Human factors

LEARNING AND EVALUATION EXPERIENCES

Participate in a buzz session to formulate definitions of human values, goals, and standards. Name ways in which these may be expressed in housing. Discuss how a family consciously or unconsciously expresses its values, goals, and standards through housing. How do values, goals, and standards interrelate?

View Teaching Aid 65 to study the influence of stages in the family life cycle on housing decisions. Identify the stages of the family life cycle. Discuss housing requirements at different stages. Predict the housing decisions to be anticipated in a specific situation involving change from one stage of the family life cycle to another.

Read case studies to show ways in which values, goals, and standards influence housing choices. [NOTE TO TEACHER: *Case Study One.* The Norris family of five has just purchased a house which is located on three acres of land in the southwestern part of the United States. This acreage provides a play area for their three small children and allows space for a garden. The two-story house has living room, dining room, three bedrooms, kitchen, pantry, bath, open front and back porches, and two large storage closets. The house has a full basement, but very little attic space. *Case Study Two.* Martha and Milton James are newlyweds. Milton has just been promoted to assistant manager of a local variety store. Martha and Milton selected a studio apartment near Milton's work and a shopping center because they do not own a car. The apartment is plainly decorated, but has space for overnight guests. Martha plans to add personal touches to the decor.] Work individually or in small groups to determine values from the following list which may apply to the case studies: privacy, space, prestige, education, beauty, love of nature, physical health, economic security, neighbors, social position, and family associations. Give reasons for selecting the values you chose. Predict housing goals each family might set for the future, such as addition of more storage space, purchase of dual-purpose furniture, making room accessories,

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	or adding another room. Discuss ways the family's standards may or may not have been met by their present housing. Suggest ways of meeting standards that were not met. Discuss how a family's housing decisions are more likely to be satisfactory if consideration is given to priorities of values, goals, and standards.
1. Resources	Brainstorm to identify the different types of human resources which might be used in providing family housing. Examples: energy, skills, community, ideas, and beliefs. [NOTE TO TEACHER: Teaching Aid 66 identifies personal resources.] Describe how resources are exchangeable. Examples: energy instead of money, money instead of time, and creativity instead of money. How may substituting resources affect the way housing needs are met?
2. Needs and wants	Brainstorm to list housing needs and wants in your future. As a class, separate the needs from the wants. Discuss reasons for changes in a family's housing needs and wants in various situations. Give examples to illustrate how something that was once considered a want by most families is now considered a need. Why has this occurred? Discuss how each of the following may be considered a want by one family and a need by another: refrigerator, draperies, floor covering, air conditioner, and dehumidifier. Predict the effect of a change in family composition on housing needs and wants. Discuss change in housing needs and wants that may occur in the stages of the family life cycle. Examples: a family is in the launching stage, and their last child will be leaving home soon; a couple is expecting the birth of their second child; a single adult would like to have a guest room.
3. Interests, activities, and patterns of living	Read selected references to gain a better understanding of how a family's interests, activities, and patterns of living influence housing requirements. Relate interests, activities, and patterns of living to housing requirements for specific families. Consider cost, space, and furnishings. Discuss how housing is influenced by an individual family's tastes, preferences, and concepts of aesthetic beauty. Find pictures of accessories, rooms, homes, and buildings which you consider beautiful. Use these to point out ways in which your tastes and preferences and concepts of beauty differ from those of others.
4. Mobility	Describe the influence of family mobility on housing decisions. Discuss the following questions: How might high

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	mobility influence a family's housing decisions? Would housing decisions differ if a family stayed in one place for a long time? Why? Discuss changes that have occurred in family mobility over the past 25 years. How has housing been affected by the changes in family mobility? What is the relationship between family mobility and the national economy?
	Interview an adult to determine human factors which have influenced their housing and home furnishings decisions. Share your findings with the class.
B. Environmental factors	Read selected references to identify environmental factors that may affect an individual's or family's housing and home furnishings decisions. Examples: climate, social considerations, culture, community, economic considerations, politics, availability of housing, technology. Discuss ways these factors may affect a specific family's housing decisions.
	Bring to class newspaper or magazine articles describing the effects of environmental factors on housing. Examples: modular housing, plastics in housing and home furnishings, inflatable housing, underground housing, solar housing, apartments, duplexes, and town houses. Share the articles with the class. Discuss the influences of environmental factors on family housing and home furnishings decisions. How have environmental factors influenced housing decisions in your community? Relate environmental factors to your family's housing. How have environmental factors influenced your family's housing and home furnishings decisions?
C. Special requirements	Listen to a resource person explain types of mental and physical handicaps that affect housing and home furnishings needs. [NOTE TO TEACHER: Suggested resource persons knowledgeable concerning needs of the handicapped are Red Cross nurses and Veteran's Administration nurses.] Discuss how alterations in housing have enabled disabled persons to be more mobile and independent.
	Cite examples of individuals with handicaps that affect housing needs of handicapped persons. Examples may be taken from literature, news stories, or real life. Describe housing facilities which have been planned to meet the special needs of a handicapped person.
	Identify activities of infants and young children. What special housing requirements do they have? Suggest room arrangements and furnishings to meet the needs of an infant or young child in a specific situation.

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

Give examples of factors affecting the special housing and home furnishings requirements occurring in the last stage of the family life cycle. Discover special housing and home furnishings designed to meet the needs of the elderly.

Determine factors which may influence housing and home furnishings decisions in a specific situation. Consider the following: human factors, environmental factors, and special housing requirements. Discuss how decisions pertaining to housing and home furnishings can be made for present or long-range satisfaction. Outline factors you feel will affect your housing and home furnishings decisions after graduation. Will your first housing be a house or apartment for a couple, a single's apartment, or a dorm room? What values, goals, and standards do you have for your housing? What resources will be available? What type of housing will you need and want? What interests, activities, and patterns of living may influence your decisions? Have you developed tastes and preferences in housing and home furnishings? Will you likely be mobile? What environmental factors are likely to influence your decisions? Do you have any special housing requirements?

COMPETENCY: *Ability to recognize factors which will influence future housing*

SUB-COMPETENCIES: *Project the effects on housing of population, pollution, and energy conservation.*

Relate technological developments to housing.

Analyze the interrelatedness of housing and the nation's economy.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
III. Future Housing Trends A. Effects of population	Read current publications to discover the effects of population patterns and trends on housing. Give examples of ways in which some areas have attempted to meet the housing needs of the population. Discuss how an increase or decrease in population affects housing. What is the present effect of population on housing?
	Listen to a resource person discuss ways future housing demands created by population needs may be met. Discuss how the structure of the home environment may be revised so that several individuals share living quarters and resources as an economic necessity. Why may the elderly be one of the groups to make this type of adaptation? Name others that might follow this trend. Discuss how families may become more dependent on resources within the home boundaries; for example, home food production as opposed to consuming the goods in the marketplace. How will this affect housing and individuals sharing living quarters? [NOTE TO TEACHER: Possible resource persons are housing authorities such as extension agent, city planner, and architect.] Summarize the relationship between population and future housing needs.
B. Effects of pollution	Brainstorm to form a class definition of *pollution*. Give examples of pollution's effects on housing. Examples: effects of air pollution on the exterior of buildings, depletion of natural resources, and mechanical means used to keep air in homes free of pollutants. Discuss ways continued pollution will affect future housing design and construction. What are some possible solutions for housing problems caused by pollution?
	Work individually or in small groups to point out methods of pollution control. Share the information with the class. Compile the information and produce information sheets on methods of pollution control used in your school, home, neighborhood, and community. Outline the effects each method will have on pollution control. Distribute to members of your community.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
C. Energy conservation	Define *energy conservation.* Explain how consuming a minimum amount of energy allows maximum use of available energy without unnecessary waste. What is meant by energy efficient housing? Give examples. Predict how energy conservation will affect future housing. Will future homes be larger or smaller? Explain. How has housing been affected by energy conservation in the last seven years? Discuss energy conservation features that consumers look for in housing.
	Listen to a resource person discuss the possible effects of energy conservation on future housing. What types of heating alternatives will be used in future housing? Discuss other features consumers will expect to find in housing such as: minimum of windows, strategically placed; fluorescent lighting in work areas, bathrooms, laundry room, basement, kitchen, hallways, stairways, and recreation rooms, or for diffused light in any large room; roof overhangs on the south; adequate attic, ceiling, or top floor insulation; storm doors, windows, caulking, and weather stripping. Discuss ways to make an existing home more energy efficient. Examples: installing ceiling fans; installing storm windows or putting clear plastic film on the inside of window frames; installing vents and/or automatic fans in attic; adding insulation; caulking and/or weather stripping windows, doors, around pipes, and around other openings. Does the color of the roof have an effect on the amount of heat gain in the house? Explain.
D. Effects of science and technology	Prepare a bulletin board showing future environments and future housing. Predict the types of housing environments which may exist in the future because of the advancements of science and technology. Examples: solar, underground, underwater, cluster housing, planned communities, and housing in outer space. If possible include newspaper and magazine pictures and articles on the bulletin board.
	Work individually or in small groups to design or describe a type of housing for the future. Integrate the effects of population, pollution, energy conservation, and advancements of science and technology in your design. Point out the type of energy, water, and air control systems which might be suitable. Present the design to the class. [NOTE TO TEACHER: Students could give short reports on housing of the future. Suggested topics: planned communities; cluster housing; building materials for homes of the future; possible effects of outer space on housing of the future.]
E. Effects of nation's economy	Interview a real estate agent; home builder; person employed in a savings and loan association, bank, or

other financial institution; or an economics teacher to identify the effects of the housing industry on the nation's economy and versa. What is meant when people say, "It's a seller's market" or "It's a buyer's market" when talking about the housing market? Share your thoughts with the class. Discuss the factors which influence the cost of housing. Relate the economy to the cost of housing. How do consumers affect supply and demand? How does supply and demand affect housing? How does supply and demand affect rental housing? How do fiscal policies control government taxing and spending? Relate fiscal policies to the economy and housing.

Study major housing legislative acts in selected references to learn how government plays an important role in the field of housing. With which legislative acts relating to housing are you familiar? How has HUD (Department of Housing and Urban Development) affected housing? Explain the purpose of the Federal Equal Housing Opportunity Council established in 1970 by the Office of Fair Housing and Equal Opportunity. How can Congress stimulate a slow housing market? Discuss upcoming government policies which will affect housing.

COMPETENCY: *Ability to point out the advantages and disadvantages of different types of housing*

SUB-COMPETENCIES: *Identify types of housing available.*

Describe characteristics of various types of housing.

CONCEPTS — **LEARNING AND EVALUATION EXPERIENCES**

IV. Types of Housing
  A. Single-family dwellings

Define *single-family dwelling.* A single-family dwelling can be defined as a free standing structure with open space on all sides, designed to be occupied by one family. View pictures to recognize different types of single-family housing construction.

Work individually or in small groups to research and report on a type of single-family housing. Examples: owner-built, custom-built, speculation-built, prefabricated, modular, mobile homes. Include the advantages, special features, and disadvantages of the housing type. Also include information such as land costs, lot size, and neighborhood population. Visuals such as illustrations, information pamphlets, etc., can be used with the report. Present the report to the class.

Visit a mobile home sales outlet or manufacturer in your area. Find out the advantages of mobile home living. Also find out about any federal, state, and local regulations governing mobile homes. What requirements are necessary when moving a mobile home? when setting a mobile home on a permanent site? Are skirts required on the mobile home? Why? [NOTE TO TEACHER: If a visit to a sales outlet is not possible, invite a salesperson from a mobile home sales outlet or a panel of mobile homeowners to speak to the class.]

  B. Multi-family dwellings

Read selected references and study pictures to identify characteristics of the various multi-family dwellings. Examples of multi-family dwellings include: high-rise and low-rise apartment buildings, row houses, garden apartments, duplexes and multiplexes, town houses. Which type of multi-family dwelling is most prevalent in your community? Discuss how the multi-family dwellings differ. How are they similar? What is the main difference between duplex and multiplex units? Define *row house*. Discuss the historical development of the row house. Define *condominium* and *cooperative*. How do these forms of ownership differ from each other? from ownership of single-family dwellings? What types of housing may become condominiums or cooperatives?

Interview persons living in one type of multi-family housing to describe the advantages and disadvantages of living in that specific type of housing. Why might (a) per-

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	son(s) choose to live in this type of housing? Share findings with the class.
C. Sharing a house	Identify ways a single housing unit may be shared by individuals or families. For example, grandparents living with married children, married children living in the home, single adults living at home, boarders, and single persons sharing a house. Why may housing be shared? Discuss fictional or real life situations depicting ways of sharing housing. Discuss the advantages of college students or working singles sharing a house. What might be some disadvantages? Study classified ads for rooms to rent. Discuss terminology of the advertisements. Define the terms *rooming house* and *boarding house*. Discuss negative and positive aspects of sharing a house. Consider facilities shared, effects on privacy, economic advantages, and entertainment advantages and disadvantages. Write a short essay about the type of housing which will most likely meet your needs after graduation. Give reasons you feel this would be the most appropriate choice for you. Should this type of housing not be available, what alternative housing might meet your needs? [NOTE TO TEACHER: For FHA/HERO, students can take a field trip to visit various types of housing. Discuss the type of family for which each would be suitable.]

COMPETENCY: *Ability to evaluate various aspects of housing*

SUB-COMPETENCIES:

Apply the decision-making process to housing or home furnishings choices.

Describe living space needs based on the needs and activities of individuals and families.

Categorize zones or areas found in housing.

Relate factors of circulation to space utilization.

Identify methods of expanding living space.

Relate a home's appearance to satisfaction received from housing.

Analyze orientation factors to consider when selecting a housing location.

Determine standards and alternatives for home comfort and sanitation provisions.

Define terminology used in housing construction.

Identify styles of architecture to meet individual and family needs and interests.

Identify factors to consider in the selection of a location for living.

Analyze general considerations to be used in selecting housing interiors and exteriors.

Specify factors contributing to safe conditions in housing.

Relate the availability of community services to the desirability of housing.

Explain the purpose and meaning of symbols and abbreviations used in blueprints or work drawings.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
V. Evaluating Housing A. Decision-making process	View Teaching Aid 93 to identify steps in the decision-making process. Discuss the steps in the decision-making process: define the problem, determine possible alternatives, analyze each alternative, choose an alternative, carry out the decision, and evaluate the results of the decision. How does following the steps of the decision-making process contribute to satisfaction with housing or home furnishings choices. Apply the decision-making process to the situation illustrated in the teaching aid. Point out factors involved in making housing decisions.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Distinguish between immediate and long-range factors affecting housing selections. Discuss how housing and home furnishings decisions require weighing advantages and disadvantages from both immediate and long-range viewpoints.
	Propose solutions to housing problems for specific family situations. Divide into small groups and write a family case study that requires housing decisions. Include number and sizes of family members, stage in family life cycle, activities and interests of family members, employment of family members, and amount of income available for housing. Exchange the written case study with other groups. Plan solutions for the housing problems described in the family case study you receive. Share the solutions and reasons for your decisions with classmates.
	Propose solutions to your future housing needs. List housing values, goals, and standards which you feel will influence your housing decisions after graduation. Summarize your needs and wants. Will you be living in a dorm room, boarding house, apartment, or house? Do you plan to continue living at home? Will you be single or married? What resources will you have for meeting your needs and wants? Will your responsibilities change? Will you be sharing more of the household tasks? Will you be paying rent, utilities, and grocery bills? Will you be saving for a future goal? Will your space needs change? Will you be sharing space with a sibling? How will you meet your needs and wants? Use the decision-making process to propose housing suitable to meet your needs and wants.
B. Space needs	Study selected references to identify the amount of space needed for various home activities. Discuss space needs for one, two, three, and four persons living together in one housing unit. Describe space required for specific activities in the home, such as food preparation, bed making, and clothing storage. How does the amount and arrangement of space influence the degree of satisfaction a family derives from housing? Discuss how personal satisfaction in housing decisions can be achieved when space is overcrowded and there are intrusions on your personal space needs.
	Listen to a realtor discuss how he or she determines what type of housing to show each client. Look through the realtor's book of houses for sale. Analyze several of the houses for sale and discuss which would meet the needs of a family at a specific stage of the family life cycle.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Determine the space needed for a specific family's activities and the square footage needed for each activity area. Work individually or in small groups to construct a chart showing the recommended amount of space for families of various sizes. Discuss the minimum space standards set by the FHA (Federal Housing Agency) for homes by the APHA (American Public Health Association) with different numbers of rooms. Explain why the space requirements per person decrease as the number of persons in the home increases. Why is the FHA space requirement for a three-bedroom house not three times as great as for a one-bedroom house? Discuss how personal satisfaction from housing and space is different for different people. Point out ways the availability and flexibility of space may influence the degree of satisfaction a family derives from housing. Discuss the space features which would help to provide greater personal satisfaction in housing for handicapped and elderly persons.
C. Storage	Brainstorm to name areas in housing where storage may be located. Examples: kitchen, bedrooms, entrance hall, bathroom, utility room, garage, dining room, and family room. Discuss the significance of the expression "a place for everything and everything in its place." How might a properly stored item be more convenient and accessible than an item that is left lying around all the time. Read selected references to identify the principles of storage. Give examples of the principles of storage in terms of location and arrangement of storage space. Examples: supplies should be stored near the place where they are to be used; frequently used articles should be stored where they can be seen, reached, and sorted; supplies for any one activity should be stored close together and in the order in which they will be used; articles should be stored to provide protection from mildew, molds, dust, and gas fumes; arrangements of storage space should allow for flexibility through movable shelves, labeled storage boxes, special dividers, movable rods, pull-out shelves, and pegboards. Give an illustration of each storage principle. [NOTE TO TEACHER: Principles of storage are illustrated on Teaching Aids 3-10.] Find examples in magazines or advertisements of ways to meet various storage needs of a family. Display examples on a bulletin board. Suggest items which could be used by the homeowner to improve utilization of storage space. View Teaching Aid 94 to identify the different types of storage units. Discuss items that might be stored in the

various types of storage units. Give examples of other storage devices for all areas of the home. Describe the possible uses of each device.

Work individually or in small groups to prepare suggestions for kinds of storage needed in the following areas of the home: living; dining; sleeping, dressing, and bathing; utility; kitchen; garage; outside; and miscellaneous. Where may storage be located in each example?

List three items that often cause storage problems for persons with limited storage space. Think of a creative storage solution for each item listed. Share your storage problems and creative solutions with the class. Examples: storage problems often include storing pots and pans, bicycles, sports equipment, toiletries, winter clothing, etc. A creative solution for storing pots and pans could be hanging the pots and pans on a brightly colored pegboard or on hooks hung from the ceiling. The same idea could be used for storing small sports equipment such as tennis rackets and baseball gloves.

View a filmstrip or find examples in magazines and catalogs of kitchen storage. Determine the available storage space by pointing out both built-in storage and storage in furnishings. Analyze the flexibility of available storage space. Discuss how storage space can be created in existing kitchens and laundry areas.

View Teaching Aid 54 to identify the four basic kitchen designs. Study selected references to determine the advantages and disadvantages of each kind. Discuss the work efficiency of kitchen layouts. Explain the work triangle. What three centers form the work triangle? Discuss what the perimeter of an efficient work triangle should measure.

Find pictures in magazines or catalogs of each type of kitchen layout. Present the layouts to the class explaining the type of kitchen design. Discuss efficiency features of the kitchen.

List various kitchen requirements in relation to the family life cycle. Include special needs for elderly persons, physically handicapped persons, and people with small children. Are most kitchens found in homes designed to meet the special needs of families? Discuss problems often found in kitchen designs, and determine possible solutions.

View Teaching Aid 56 to identify space requirements of the laundry area. Which factors are most important to consider if space is limited? Where might laundry equipment be located in the home? Examples: utility room, basement, garage, kitchen, bathroom, and closet. Discuss the advantages and disadvantages of the various laundry areas. How can storage space best be utilized in the laundry area? Discuss how some of the space requirements for a laundry can be provided by nearby areas of the house. (for example a laundry area near the kitchen would allow use of the kitchen sink for pre-treating; a bed may be used for folding, etc.) Discuss storage ideas for persons with special needs.

Brainstorm to list storage desired in bedrooms, bathrooms, and/or dressing areas. How do storage space requirements vary with the interests of family members? Compare the storage needs of a toddler's room with the needs of a teenager's room. Discuss storage factors to consider when the space is shared.

D. Zoning

View Teaching Aid 58 to identify the zones or areas found in housing. Name activities that take place in each zone in the home. How does arrangement of the various zones influence the comfort and livability of housing? [NOTE TO TEACHER: Provide students with floor plans of apartments, duplexes, mobile homes and small houses and let them determine the zones.]

Tour various types of housing or view floor plans to locate the zones. Explain how the same area may be used for more than one zone. Discuss how the use of zones may vary according to a person's life style or stages in the life cycle. Discuss how furniture can be used to help buffer between zones. Discuss solutions to specific zoning problems such as: bedroom facing busy street, washer-dryer adjacent to bedroom, study area located near television, or garage entrance creating traffic through living room. How do zones contribute to comfort and livability of housing?

Draw a simple floor plan of your home or a home that you are familiar with. On the floor plan, shade or circle in different colors the three main zones. Provide a key to identify each zone. [NOTE TO TEACHER: The floor plans on Teaching Aids 60-62 can be duplicated and used as work sheets for this activity. Students could also use floor plans of various types of housing from newspapers and magazines.]

E. Circulation

View Teaching Aid 59 and form a class definition for circulation or traffic lanes within housing. Discuss why a convenient traffic lane should be direct, efficient, and without obstacles. How do traffic lanes contribute to the usability of housing space?

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Explain circulation in housing. Draw traffic patterns on floor plans, illustrating circulation between rooms, within rooms, and to the outside. In what ways is the traffic pattern in each plan convenient? inconvenient? [NOTE TO TEACHER: The floor plans on Teaching Aids 45, 46, and 60-62 can be duplicated and used as work sheets for this activity. Students could also use floor plans of various types of housing from newspapers and magazines.]
	Plan a furniture arrangement showing an efficient use of traffic lanes and zones for each room on a floor plan used in the previous activity. Refer to a chart in selected references for the standard space needs for clearance and area groupings of furniture. Share the plan with classmates and discuss the advantages and disadvantages of the traffic lanes and zones. [NOTE TO TEACHER: To expand the learning experience, assign family case studies and have students draw furniture arrangements for traffic lanes to meet the needs of the family members in the case studies. Examples: family member with a physical handicap requiring a wheelchair or some other physical handicap; families in the various stages of the life cycle. The same floor plan should be used for all case studies. Share the students' drawings of furniture arrangements to show how space can be adapted to individual needs.]
F. Expanded living space	View Teaching Aid 95 to identify methods of expanding living space. Discuss how the maximum utilization of indoor and outdoor space can add to livability. Discuss how the need to conserve energy and materials and the trends toward smaller homes has encouraged families to convert various indoor and outdoor spaces into usable or multipurpose living space. For what purposes could converted indoor space be used? converted outdoor space? How might traffic lanes and zones be affected by expanded living space? Discuss how to increase the apparent size of rooms. Some examples: high ceilings, light, color, openness. How might multipurpose areas increase the usefulness of space? Discuss other ways to increase the usefulness of space.
	Develop a class check list for determining the safety and convenience of traffic patterns in the home. Examples: Do the traffic patterns have enough space for persons to move freely? Can persons move throughout the house without disturbing others? To avoid accidents, do traffic patterns lead to work areas but not through them? Are traffic patterns free of furniture, electrical cords, and scatter rugs? Refer to selected references for additional guidelines for safe and convenient traffic lanes.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Use the check list to evaluate the safety and convenience of traffic patterns created by the arrangement of furniture. The floor plans and the furniture arrangements from the previous activity may be used for evaluation.
G. Appearance	View pictures or tour housing which illustrates different styles and types of housing. Discuss how your feelings are affected by the line and design of the housing. Relate a home's comfort, floor arrangement, and appearance to satisfaction received from housing. Predict the possible effects the housing might have on family members. Discuss why you would be satisfied or not satisfied to live in each.
	Brainstorm to identify methods to improve the appearance of existing housing. How can the appearance of housing be improved without spending a large sum of money?
H. Orientation	Study references to define *orientation* as it relates to housing. List factors that are considered in orientation of a housing unit. Share your findings with the class.
	View Teaching Aids 96-98 to gain a better understanding of the orientation of housing to its site. Discuss the advantages and disadvantages of orientation of specific housing. How may the sun be used to advantage in orienting housing? How may it be a disadvantage? Consider the effects orientation may have on physical comfort of occupants, amount of natural light in the dwelling, fuel costs, and view from the dwelling.
	Demonstrate effects of varying the placement of housing on a lot. Work in groups to predict the effects of varying housing placement on a specific lot. Describe and sketch a housing location. Include such factors as climate, street pattern, view, landscape, orientation, and size and shape of lot. Use pictures and floor plans of housing to show how these factors would affect the enjoyment of the housing in a variety of placements. Examples: a bedroom window facing the east will allow in early morning sunlight; a family room picture window may emphasize a beautiful view. Which examples of housing may be better suited to the lot described? What special considerations must be made in orienting multi-unit dwellings? Why?
	State the meaning of *climate control*. Share with the class. Formulate a class definition. Describe means of climate control. Examples: heating and cooling units, pools of water, windows, shade trees, insulation, windbreaks, berms, and cross ventilation. Discuss how each

method may affect climate control. Discuss housing problems that may result if climate is not controlled. Show how a means of altering a natural climate may reduce a problem and increase the occupants' comfort and satisfaction.

Determine aspects of your community's climate that require control in housing. Analyze the climate control features of a dwelling in your community. Point out aspects of climate that the housing has provisions to control. Is the climate control adequate? Do the occupants agree? Explain. [NOTE TO TEACHER: A city planner could be invited to discuss climate control features of housing in the community.]

Propose orientation of housing floor plans for housing development plots in your community. Consider such factors as climate control, view, privacy, street pattern, and landscape. Arrange according to the location of plots in the development area. Analyze the relationship of the houses to each other. In what ways did integration into the neighborhood affect the appearance, function, and desirability of the housing? What changes are indicated to improve the orientation and climate control for housing in the neighborhood? Support or refute the following statement: "Some floor plans are unsuitable for particular neighborhood plots."

I. Equipment

Study references to identify cooling needs in different climates in various parts of the world. Describe various methods of air conditioning. Discuss the advantages and disadvantages of each type. Discuss how the occupant can control the cooling system for efficiency of operation and conservation of energy.

Listen to a resource person from a local air conditioning business describe an adequate air conditioning system for specific housing. What is the approximate cost of installing and operating this system? Why is the size of an air conditioner important? What happens when the air conditioner unit is too small? too large? Explain the purpose of ceiling fans and attic fans. Define *Btu.* What is meant by the Btu's of an air conditioner?

Compute the size air conditioner needed to cool a specific housing unit or room. Use the recommendations on Teaching Aid 87 for your computations. Determine the energy efficiency ratio of the air conditioner. Do multi-unit dwellings require more or less cooling than single unit dwellings? Why?

Brainstorm to list heating needs in various climates. Discuss the types of fuel and heating methods used in

CONCEPTS **LEARNING AND EVALUATION EXPERIENCES**

your community and in various parts of the world. Make a chart listing the type of fuel, heating method, and advantages and disadvantages of each. Examples: type of fuel–electricity; heating method–central heating; advantages–clean, can be regulated; disadvantages–expensive. What alternative means of heating may be available if your supply of fuel is inadequate or depleted? Which would require more fuel for heating–a single unit dwelling or a multi-unit dwelling? Why?

Listen to a resource person from a local home heating firm discuss the following: ways and means of controlling heat in the home, annual estimated cost of heating the home by particular types of fuels, and advantages and disadvantages of different types of heating systems.

Define terms related to electrical equipment in the home. Examples: circuit, amperes, volts, watts, and fuse. Discuss the definitions with classmates.

View Teaching Aid 88 to identify electrical symbols shown on blueprints which indicate wiring (outlets and switches). Discuss the advantages of being able to read the wiring symbols on a blueprint.

Complete a worksheet by indentifying the electrical wiring symbols illustrated on a floor plan. [NOTE TO TEACHER. Teaching Aid 89 can be duplicated for a student work sheet. Answers are: 1) exhaust fan, 2) telephone, 3) clock, 4) 220 V. duplex outlet, 5) switch, 6) wall light or sconce, 7) ceiling light, 8) television outlet, 9) 115 V. duplex outlet, 10) weatherproof outlet.]

Listen to a resource person discuss adequate wiring and safety regulations and codes in your community. List some signs of inadequacy. Discuss examples of planning wiring according to the total square feet and the amount of electrical equipment in the housing unit. Identify requirements for household wiring such as the size of service entrance; the number, use, and placement of circuits and convenience outlets; the lighting and switching system; exterior lighting and outlets; and provision for increased electrical needs. How do requirements differ for single and multi-unit housing?

Work in pairs to show where to place convenience outlets and switches on a floor plan. Relate the number of circuits to the total wattage needed by the specific plan. Present the plan to the class.

Watch a demonstration or film on use of a computer to control home heating and cooling. How can this type control help to save fuel?

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Study references to define minimum plumbing needs in today's housing. List specific needs such as water and gas supply, sewage disposal, and space for bathroom facilities. Share your findings with classmates.
	Explain factors to consider when planning or evaluating plumbing needs. Obtain specific information concerning the plumbing code in your community. Discuss findings in class. Discuss the minimum requirements in planning a bathroom. Study plumbing layouts from blueprints to illustrate adjacent, vertical, and rambling plumbing layouts.
	Relate plumbing costs to arrangement and materials. Find examples of plans in which the plumbing has been planned to minimize building costs and maximize efficiency. Discuss the desirable features of the plans. Show use of the materials available for plumbing, such as copper, cast iron, ceramic tile, lead, and plastic pipes. Samples of the materials may be obtained from a local plumber or builder. What is the cost per unit of each of these materials?
J. Construction	Define terminology used in housing construction. Examples: foundation, floors, exterior walls, interior walls, studs, trusses, headers, joists, beams, subfloor, bridging, fire stops, plates, rafters, insulation, roof, gables, heating, air conditioning, and plumbing. Discuss the terms and definitions with classmates. Complete a work sheet to identify construction features of a house. Discuss any construction features not shown in the illustration. [NOTE TO TEACHER: Teaching Aid 99 can be duplicated for a work sheet or used as a transparency or short quiz. The answers are: 1) gable, 2) exterior walls, 3) door, 4) cooling and heating systems, 5) roof, 6) insulation, 7) interior walls, 8) windows, 9) floors, 10) foundation, 11) footing, 12) plumbing.]
	Listen to a resource person such as a building contractor explain materials commonly used in housing. In what part of the construction are these materials most often used? How do today's building materials and construction techniques differ from those used in building older housing? Discuss the differences in wood and aluminum window frames. What building materials or construction techniques should one be wary of in selecting old or new housing?
	Work individually or in small groups to prepare a chart to show commonly used building materials, their cost per unit, and the cost of different types of construction. Which building materials are most expensive? least

expensive? Which types of construction are most expensive? least expensive? How do costs vary from community to community? [NOTE TO TEACHER: Students can work individually or in small groups to find information on two or three building materials. The information could be compiled on the chart. Students might gather information by touring housing at different stages of construction to see studs, roof trusses, insulation, types of roofs, sheathing, etc.]

Determine housing costs by visiting housing for sale in the community or by studying the housing for sale section of the classified ads in the newspaper. Study houses which vary in age, type, size, construction, exterior finishes, and type of building materials used. Analyze the housing considering those factors, and suggest their costs. How near are your appraisals to the actual sale prices? Discuss reasons for differences.

Study selected references to determine standards for judging quality in housing construction. Consider building materials, construction techniques, costs, and age of housing. Share your findings with classmates. What standards may be used to judge housing construction? Would these standards apply only in purchase of housing? Point out factors to consider when judging the construction of existing housing. Consider wiring, termite damage and rot, heating and/or air conditioning system, water heater, insulation, plumbing, exterior/interior structures, floors, and walls. What should you check in the basement of an existing house?

K. Architecture

Define *architecture*. Share your definition with classmates. Compare your definition to the following: architecture is the style of a building and includes design, construction, and decorative treatment.

View Teaching Aids 69-77 to study architectural styles. How do traditional and contemporary architectural styles differ? Discuss how past architectural styles are adapted in today's housing. Discuss architectural styles prevalent in your area, state, and region of the United States. Do they vary or are they similar? Explain. What is meant by architectural fads? Discuss fads in architectural design found in your community. Why did these styles become fads?

Work individually or in pairs to illustrate an architectural style of housing. Examples: Colonial Era (New England or northern colonial, saltbox, garrison, Cape Cod, southern colonial, Georgian, Dutch colonial, log cabin, Spanish, pueblo or adobe, Monterey, Norman, mansard, French

CONCEPTS | **LEARNING AND EVALUATION EXPERIENCES**

colonial or provential), Early National Style (federal, classical or Greek revival), Victorian Age (Victorian, Gothic revival, electic design), Modern (ranch, split-level), Contemporary (A-frame, geodesic, solar, earth-sheltered, plastic or foam). Select an architectural style listed on the assignment cards provided by your teacher. [NOTE TO TEACHER: Prepare index cards by writing the name of one style of architecture on each card.] Explain the origin and meaning of the name of the architectural style. Illustrate the style with pictures. Point out how the past architectural style is adapted in today's housing. Present the information to the class.

Find examples of ways an architectural style may be continued from the exterior to the interior of housing. Display pictures on bulletin board. Possible title: "Inside Out." Discuss the advantages and disadvantages of continuity in the interior and exterior design of housing.

L. Location

Interview parents, teachers, and other persons in the community to identify factors they considered about location when they selected housing. Why did they select the location? How many possibilities did they consider? Did they reject any options because of location or type housing? Why? Share your findings with the class. Make a class list of the factors about location or type which influenced housing selections. Discuss the location considerations which concerned the majority of persons interviewed.

Describe factors to consider when selecting the location of housing. Examples: condition, size, and pride of neighborhood; aesthetic and cultural features; location of schools, utilities, and services; access to shopping areas, churches, parks, and recreational facilities; assessments; convenience to work; appearance of housing; traffic patterns; and zoning regulations. [NOTE TO TEACHER: Teaching Aid 100 lists factors affecting the location of a home.] How might community characteristics influence the satisfaction received by residents? How might a neighborhood influence a family's ways of living? How may the addition of new facilities change a neighborhood? How may the distances to various activities affect family life? Is the neighborhood always an influence on a family's satisfaction? Why?

M. Exterior

Participate in a buzz session to list factors which influence the exterior appeal of housing. Include site, grounds, and appearance.

Find two pictures of housing exteriors, one pleasing and one not pleasing to you. Explain reasons why the ex-

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	teriors are or are not pleasing. Do classmates agree? Discuss the possible effects of the housing exteriors on occupants and neighbors. What factors, if any, were abused in the housing exteriors? How might the exterior of each be improved? How can you improve the exterior of your dwelling? Examples: plant flowers; provide a pleasing view through windows into dwelling; plant a window box; make needed repairs.
N. Interior	Cite needs of family members which would influence housing interiors, such as the need for display space for collections or the need for natural lighting for painting or other hobbies. Discuss how valued possessions or preferences of family members such as a collection of southwest art, an interest in growing plants, or preference for oriental design may influence housing interiors. Give examples of how personal factors, such as neatness; color preferences; wall, ceiling, window, and floor finish preferences; and concept of harmony in designs influence the appearance of housing interiors. Select two pictures of room interiors, one which you feel is pleasing and one which is not pleasing to you. Relate personal factors and values concerning room interiors to your feelings about these rooms. Discuss ways to change the interior of your home to better meet your family's needs and wants.
O. Safety	Brainstorm to cite factors which contribute to safe conditions in housing. Examples: storm doors, locks on windows and doors, dead bolts, exterior and interior lighting, well-trimmed bushes and trees, smoke detectors, intercom systems, fire escape routes, traffic patterns, and burglar alarms. Discuss how safety in the home is promoted through safety devices, management procedures, proper storage, labeling, furnishings, and care of electrical and gas equipment. Do families feel more comfortable in housing they consider to be safe? Explain. Watch a demonstration or view a film on ways a microcomputer can aid in providing home safety by turning appliances and lighting on and off, being connected to a burglar or fire alarm system, etc. Do you feel that this type of home safety control will become commonplace in the future? Why? Study references to find the major causes of accidents in the home. What type of accident accounts for the largest number of deaths of children under one year of age? of adults? of teenagers?

CONCEPTS | **LEARNING AND EVALUATION EXPERIENCES**

Read newpaper articles about home accidents. Discuss ways in which these accidents might have been avoided. Suggest solutions to eliminate home hazards. What hazards are sometimes built into housing? [NOTE TO TEACHER: For FHA/HERO, students can conduct a safety day or workshop in the school to emphasize home safety.]

Use a class-prepared safety check list to survey your home to determine hazards. If possible, correct any hazards which exist. Discuss your results with the class.

P. Availability of community services

Brainstorm to list community services available in your area, such as sanitation department, parks, recreation facilities, mail delivery, library, schools, churches, shopping areas, public transportation, and utilities. How are these services funded? Discuss how the availability of community services may influence desirability of housing in a specific area.

Show the effects community services have upon the desirability of housing by examining the real estate section of the classified ads and reporting to the class the community services mentioned. Which services were not mentioned? What terms are used to describe distance to community services? How precise are these terms?

Q. Comprehension of work drawings

View Teaching Aids 88 and 101 to identify symbols used in blueprints or work drawings. Explain the purpose and meaning of symbols and abbreviations used in work drawings. Discuss factors to look for in work drawings that will help to meet families' needs. Examples: light switches at entrances and exits, location of outlets, door widths, hall widths, plumbing location, and placement and types of windows and doors. Discuss how understanding blueprints or work drawings may help one to evaluate housing in terms of family needs.

Complete a work sheet by identifying the symbols commonly found on floor plans. [NOTE TO TEACHER: Teaching Aid 102 can be duplicated for a student work sheet. Answers are: 1) ceiling light, 2) concrete, 3) 115 V. outlet, 4) water closet, 5) bathtub, 6) four-way switch, 7) wall light or sconce, 8) concrete block, 9) double sink, 10) telephone, 11) built-in shower, 12) weatherproof outlet, 13) toilet, 14) 220 V. outlet, 15) fireplace and flu, 16) brick, 17) switch, 18) sliding door, 19) doorbell, 20) door, 21) window, 22) television outlet, 23) folding door, 24) clock, 25) wood.]

Analyze a work drawing in terms of family needs. View Teaching Aid 103 which shows the work drawing of an apartment. Point out provisions that have been included to meet family needs. What further provisions may need to be made? Will this work drawing account for all of the needs of a specific family? How could additional needs be met inexpensively?

Work in groups to determine the housing needs of a specific family. Consider the following apsects: *Space*. How much housing space does this family need? What type of space do their activities require? *Zones*. What type of zoning arrangement may be desirable within the family housing? What type of circulation pattern is indicated by the description of the family? *Storage*. How much storage is needed for the family? Where should the storage areas be located? *Appearance*. What type of housing appearance would this family value? How may the family's life style affect housing orientation needs? How may choice of architectural style be influenced by family values? *Investment*. How may family income, money available for investment, and anticipated length of stay influence housing considerations? *Location*. How may family composition, occupations, activities, and transportation limitations influence housing location? *Safety*. What special safety considerations may this family demand?

Develop a rating scale for evaluating housing. Work in groups to adapt the class rating scale for use in selecting housing to meet the needs of a specific family.

Take a field trip to appraise the suitability of various types of housing for specific situations, such as a newly married couple on a limited income, a single working person, a family expecting their third child, or an elderly couple needing to move to a smaller house. From the housing you have visited, choose the type of housing most appropriate for the specific situations. Justify your selections.

Evaluate housing which would meet your needs after graduation and which would be within your price range. Select the housing best suited for your needs. Describe advantages and disadvantages in detail. Use the decision-making process to select the one dwelling most likely to meet your needs. Propose ways to improve unfavorable aspects.

COMPETENCY: *Ability to assess the management and consumer aspects of housing, home furnishings, and equipment*

SUB-COMPETENCIES: *Analyze the legal and financial aspects of obtaining housing.*

Identify legislation and agencies for housing protection.

Explain ways to minimize the cost of operating and maintaining a home.

Assess the importance of energy conservation in the home.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
VI. Management and Consumer Aspects of Housing and Home Furnishings A. Legal and financial aspects of housing 1. Renting	Brainstorm to name advantages and disadvantages of renting housing. Discuss how renting housing may allow more mobility and less responsibility for upkeep than owning. Interview people who are renting their housing. Why do they prefer to rent? Do they plan to rent their housing only temporarily or permanently? Share your findings with the class. Listen to a resource person such as an apartment manager or real estate agent explain the following: specific legal forms of obligation to be signed by tenant; specific obligations of landlord; financial aspects of renting such as deposit, first and last months' rent, and any special requirements. Discuss obligations and rights of the tenant and the landlord. Is a lease required if rental is on a month-to-month basis? Identify terms found in leases by examining sample copies. Find definitions of the terms. Who is the lessor? the lessee? What is the purpose of a lease for the lessor? for the lessee? What is a security deposit? Fill out a lease form to discover responsibilities and privileges in renting housing. Discuss the implications for the renter of the provisions in the lease.
2. Buying	Study selected references to discover advantages and disadvantages of home ownership. List and discuss advantages or disadvantages. Define real estate terms related to home ownership, such as *amortized, appraisal, collateral, down payment, title investigation, deed registration, insurance, contract, credit, earnest money, abstract,* and types of *deeds, mortgages,* and *interest.* Keep definitions as a working reference. Divide into five groups. Each group will choose one requirement associated with housing purchase costs. Study

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	references to determine the meaning and need for each requirement involved in housing purchase costs. Present your group's findings to the class.
	View Teaching Aid 67 to see the difference the amount of the down payment makes toward owning your own home. Discuss the advantages and disadvantages of making a low down payment or a high down payment on housing.
	Study a chart showing how the amount of the down payment and the interest rate and time span of the mortgage affect the eventual cost of a home. [NOTE TO TEACHER: Charts may be obtained from your local housing office or lending establishment.]
	Listen to a bank loan officer, realtor, or Federal Housing Administration representative discuss expenses of home ownership. Discuss the following topics: steps in purchasing housing, advantages and disadvantages of various sources of credit for financing purchase of housing, similarities and differences in types of mortgage loans, steps in obtaining a mortgage, alternatives to be considered when selecting a mortgage, and the effect of mortgage terms on the total cost of housing. What are the procedures that take place during the closing of the purchase? Who is expected to pay for the various closing costs? Why is it important to have the owner's (or owners') name(s) on the deed? What kind of homeowner's insurance protection should you look for? Why is a title search and title insurance important to buyers of existing homes? Point out factors that may influence the amount of family income to be spent on housing, such as stage in life cycle, number and ages of family members, living patterns, geographical location, and availability of housing.
3. Building	Point out factors which a family may need to consider when building a house. Examples: time involved in planning the design, building codes, zoning laws, cost of architectural services and building materials, custom interiors, increased time for building, and where to stay while building. Discuss the advantages and disadvantages of building.
	Compile information concerning legal and financial obligations associated with building housing. Determine the feasibility of building housing in a specific situation.
4. Renting vs. buying	Read selected references to determine the percentage of monthly or annual income a person should spend on housing given a monthly income. Share your findings with

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	classmates. How might the amount available to spend on housing affect the decision to rent or buy? Divide into two groups for a debate on renting or buying a home. Depending on the side you will represent, research the pros or cons of renting or buying.
5. Financing a. Lending agencies	Interview five persons who have purchased a home. From what type of agency did they acquire their loan? As a class, determine the most widely used type of lending institution reported in your interviews. List any other possible agencies through which a loan might be financed. Visit at least one lending institution in your community to find out how a person applies for a mortgage loan. Also, find out the requirements assessed by the institution before a loan can be granted. Share your findings with the class. [NOTE TO TEACHER: If a field trip or individual visits are not possible, a panel of persons from the various lending agencies may be brought into the classroom to inform students on loan application procedures.]
b. Establishing credit	Brainstorm to formulate a class definition of "credit rating." How is a credit rating established? Why is your credit rating important?
c. Types of mortgages	Listen to an authority on home mortgages summarize the types of mortgages available. Prepare questions in advance for the guest speaker to answer. Include questions on conventional, FHA-insured, VA-guaranteed, FmHA, variable rate, roll-over, and graduated payment mortgages. Discuss the advantages and disadvantages of each. Complete the work sheet on Teaching Aid 68 to gain a better understanding of the types of mortgages available. [NOTE TO TEACHER: Answers are: 1) FmHA, 2) conventional, 3) FHA-insured, 4) variable rate, 5) graduated payment, 6) roll-over, 7) VA-guaranteed.] Examine mortgage forms. Discuss reasons a lender may need the information requested. What are the qualifications for obtaining a mortgage? Explain how FHA-insured, VA-guaranteed, and FmHA mortgages encourage home ownership of qualified families with limited incomes. Use a computer program to compare various mortgages. Compare the effects of different down payment amounts, interest rates, mortgage lengths and mortgage terms on

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	monthly payments and on the total amount paid for the dwelling including interest.
6. Taxes	Interview homeowners to identify taxes the homeowner must pay. Summarize benefits the homeowner buys with taxes. Examples: schools, sewer lines, roads, and police and fire protection. Talk with a tax consultant; then explain possible income tax advantages of home ownership. Is the advantage always worthwhile? Why? Share findings with the class.
7. Insurance	Listen to a resource person who is an authority on homeowner's insurance present information related to specific homeowner's protection needs. What types of homeowner's insurance are available? What type insurance is available for renters? How are insurance premiums paid? Discuss benefits, premiums, and advantages and disadvantages of insurance related to housing. Are insurance rates for homeowners the same in all states? within states? Why? What factors affect housing insurance rates?
8. Transfer of ownership	Study references to obtain a definition of *transfer of ownership*. What are other phrases used to describe the transfer of ownership? Discuss the steps included in the transfer of home ownership such as: signing the deed, delivering it to the new owner, and recording it immediately in the proper government office. Study references, or listen to a resource person explain the steps in transferring ownership. Include contract of sale, deed, certificate of title, abstract, and closing costs. What are the costs involved in each step? What are the legal responsibilities of the original owner? of the buyer?
9. Foreclosure on mortgage	Study selected references to define the term *foreclosure*. Compare your definition to the following: foreclosure is the act of taking back the mortgage from the borrower because of payment default. Discuss the reasons a borrower might default on payments. What measures might the borrower take to help avoid nonpayment?
10. Moving expenses	Review mobility trends in the United States. Information may be obtained from Chambers of Commerce or from periodical literature. Approximately how many families move from one address to another every year? What age group tends to move most often? In today's business world, do large companies tend to move people more or less often than 10 years ago? Explain your answer. Give examples from your own experiences and those of acquaintances of reasons people move.

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

Listen to a resource person discuss services offered by moving companies. What are the fees for these services? What are the advantages of using these services? What is the company's policy on articles that the homeowner packs for moving? Are moving expenses often paid by the company where the homeowner is employed?

Divide into small groups to determine the costs and advantages and disadvantages of moving household goods by various methods. Be sure to include information on people moving themselves as well as being moved by professional movers. Differentiate between private movers and nationwide movers. Share information with other groups.

Interview persons who have made household moves and find out what suggestions they would make to someone planning a move. Discuss ideas with classmates. Share experiences class members have encountered in moving. Describe specific problems and ways they were handled. Organize class suggestions to formulate orderly steps for moving from preparation to unpacking.

B. Legislation and agencies for housing protection

Choose one topic concerning legislation or one agency for housing protection listed on the chalkboard. Go to the library and research your chosen topic. Give a brief summary of the topic to the class. [NOTE TO TEACHER: Topics to list on the chalkboard include: Housing Act of 1949, of 1968, and 1977; Housing and Urban Development Act of 1968; Civil Rights Act of 1866; Title VIII of Civil Rights Act of 1968; Title I of the Housing and Community Development Act of 1974; The Equal Credit Opportunity Act; Federal Housing Administration; Department of Housing and Urban Development.]

Role play situations showing common housing discriminatory practices. Which housing legislation or agency helps to protect against such practices? [NOTE TO TEACHER: Examples for role plays are: young woman unable to rent or buy housing without her father co-signing for her; working couple denied loan for mortgage because his income is too low and hers is not considered; black couple steered toward black neighborhoods by real estate agents when looking for housing; two persons of same sex denied a lease to rent a single-family home.]

Listen as a speaker from your local housing authority explains the proper procedure to take for reporting discriminatory practices and other housing violations. Find out what the usual results of such reports are.

CONCEPTS

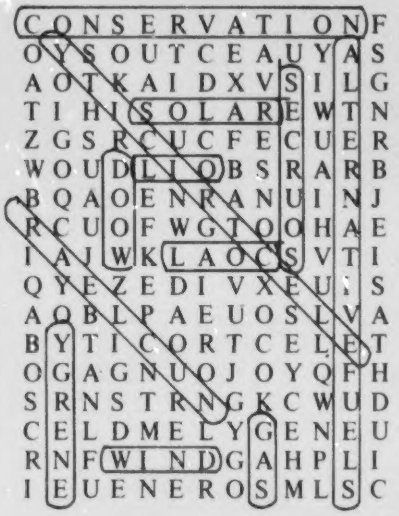
C. Energy conservation in the home

1. Energy sources

LEARNING AND EVALUATION EXPERIENCES

Define *energy conservation*. Read selected references and discuss. Develop a class definition of energy conservation.

Complete the energy and conservation seek-and-find to identify the various energy sources available today to consumers. [NOTE TO TEACHER: This seek-and-find puzzle is Teaching Aid 104. See illustration below for answers to seek-and-find.]



```
C O N S E R V A T I O N F
O Y S O U T C E A U Y A S
A O T K A I D X V S I L G
T I H I S O L A R E W T N
Z G S R C U C F E C U E R
W O U D L I O B S R A R B
B Q A O E N R A N U I N J
R C U O F W G T O O H A E
I A J W K L A O C S V T I
Q Y E Z E D I V X E U I S
A O B L P A E U O S L V A
B Y T I C O R T C E L E T
O G A G N U O J O Y Q F H
S R N S T R N G K C W U D
C E L D M E L Y G E N E U
R N F W I N D G A H P L I
I E U E N E R O S M L S C
```

Take a survey of your community to determine all types of energy sources used. Interview persons who use solar energy, wind, or wood to generate power to heat, cool, and/or light their homes. What are some of the advantages and disadvantages of using these types of energy sources compared to more conventional sources such as electricity, gas, and oil?

Contact power companies in your area or listen to a speaker, such as a representative from your local utility company, to learn the sources used to produce electricity for the consumer. Ask questions such as: What do you believe will be the major energy source of the future? By what methods do you inform consumers of energy conservation tips?

Debate the issue of nuclear power as an energy source. Refer to references for information and facts. What is the prevailing sentiment among class members? Poll friends and family on this issue and report your findings to the class.

Write a brief report summarizing how an energy source is converted into electricity. Discuss your findings with the class and suggest other possible sources that could be used in your area to produce power. [NOTE TO TEACHER: Sources may include water, coal, nuclear energy, gas, oil, wind, solar, wood, and other alternative fuels.]

2. Conservation measures

Brainstorm to name ways to conserve energy in the home. [NOTE TO TEACHER: *Examples*: keep thermostat at 78° in summer and 68° in winter; shade air conditioning unit with awning if exposed to direct sunlight; clean air conditioning filter regularly; set hot water heater between 120° and 130°; use cold water for house cleaning where possible; use water flow restrictors; turn off lights and other appliances when leaving a room; use small appliances rather than the oven; do not open oven door to peek in oven; bake in glass or ceramic dish and reduce oven temperature by 25°; use correct size surface unit for pan; cook foods at lowest possible temperature; keep freezer compartment full to prevent entrance of cold air; know what you are looking for before opening refrigerator door; wash only full loads of clothes and dishes; use cold water for washing and rinsing clothes as much as possible; keep dryer filter clean; close fireplace flu; cover fireplace opening with glass doors; wear heavy indoor clothing in cold weather.] What are some other energy saving practices? Can you think of changes in your life style that you wouldn't mind making to save energy and scarce resources? (For example, use a bicycle or public transportation for short trips around town, move close to where you go to school or work, use fewer petroleum-based products, etc.)

Draw a cartoon illustrating the misuse of energy in the home. Place cartoons in a school hall display. Suggested title: "Are You A Consumer or a Conserver?"

Develop a list of conservation practices that could easily be accomplished by members of your family at home. Share your list with class.

Read case studies and point out ways in which energy is wasted. Determine how the person(s) in the case study could conserve energy. Share your suggestions with the class. [NOTE TO TEACHER: *Examples for case studies*: 1) A teenager who uses the blow dryer to dry hair, 2) a teenager watching television while listening to the stereo with head phones with a radio or TV on as well, 3) a couple who both leave for work early and arrive home after dark leave several lights on and leave the thermostat on the heater turned up (or air conditioner turned down) so the house will be comfortable when they arrive home, 4) a child or adult who decides what to eat and then fans the food with the refrigerator door several times while getting out one thing at a time.]

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	View Teaching Aid 105 about EnergyGuide labeling. Discuss the major appliances and equipment that EnergyGuide labels are used on. Discuss the information provided on the label. [NOTE TO TEACHER: EnergyGuide labels are found on all refrigerators, refrigerator-freezers, freezers, water heaters, clothes washers, dishwashers, room air conditioners, and furnaces. Students could also compare information on the EnergyGuide labels of name brands to store brands. For example, compare Sears with Maytag.] Do you think the EnergyGuide labels give enough information? What other information might be included? Could you use the information on the EnergyGuide labels to decide to *do without* an appliance you had intended to buy? How? Could you use the information on the EnergyGuide labels to cut down on the energy consumed by an appliance you already own? Would you have to change your use of that appliance to do so?
	Complete work sheets on EnergyGuide labels to learn how to figure the life time costs of an appliance. Discuss a situation where it would be useful to know the life time cost of an appliance. [NOTE TO TEACHER: Work sheets are Teaching Aids 106 and 107. *ANSWERS: Step 1.* $485, $545, $60. *Step 2* $70, $51, $19. *Step 3.* $1,050, $765, $285. *Step 4.* $1,535, $1,310, $225. *Step 5.* $60 ÷ $19 = 3.15 years.]
D. Water usage 1. Amount used in the home	Listen to a resource person from the local water district speak to the class about water consumption in your community. Prepare questions to ask such as: What is the cost of water per thousand gallons? How do you read a water meter? What are some methods of checking to determine how much water is consumed for a specific activity, such as taking a shower? How can you test for leaky faucets in the home? What is the water supply outlook for our area? What are some ways the average person can help conserve water?
	Conduct an experiment to determine how much water is lost through a leaky faucet Turn on a faucet so that there is a slow, but constant drip. Count the number of drips from the faucet for one minute. Figure the total number of gallons wasted if a faucet dripped at this rate for a year. [NOTE TO TEACHER: A faucet dripping at a rate of one drop per second wastes approximately 2,400 gallons of water per year.]
	Read selected references about water usage. How much water is used in the United States each year? What percentage of total water consumption is used in the home? Does a shower or a bath use more water? Does a dish-

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	washer or washing dishes by hand use more water? When is the best time of day to water a lawn?
2. Conservation measures	Divide into groups. Each group will choose one area of the home, such as the kitchen, bathroom, or outdoors, and list ways in which water could be conserved in the area. List suggestions on butcher paper, then share with the class. Selected references may be used if necessary. [NOTE TO TEACHER: *Examples of conservation ideas*: Kitchen–wash only full loads in clothes washers and dishwashers, keep cold water in refrigerator to prevent running of tap water until it gets cold, turn off taps completely to prevent dripping. Bathroom–use less water for baths and showers, place brick in toilet tank, install water-saving shower head, don't leave water running while brushing teeth. Outdoors–use pistol grip nozzle on hose, use garden equipment with trickle or drip system, save water from rinsing dishes to water plants, etc.]
E. Reading utility meters	Read selected references on utility meters. Explain how the principle of reading gas and electric meters is similar. Why would it be useful in conserving energy to know how to read meters? When a pointer is between two numbers, which number should you record? If the pointer is between "0" and "9," how should you read the meter? View Teaching Aids 108 and 109. How do gas and electric meters differ? How are they similar? Write on paper the reading for each meter. Compare with classmates' papers. Did you get the correct readings? Complete a work sheet to practice reading meters. [NOTE TO TEACHER: The work sheet is Teaching Aid 110. This could also be used as a transparency for a class activity.] Record your family's energy usage by reading your utility meter. Call your local utility company to find the rate per kilowatt hour for electricity or rate per cubic feet of gas. How much did your energy usage cost for one week? [NOTE TO TEACHER: Teaching Aid 111 is a meter reading record.]
F. Minimizing operating and maintenance costs 1. Operating costs a. Housing	Study references or interview parents or other homeowners to discover factors related to the operation and maintenance of housing. Estimate the costs related to these factors in various types of housing. Discuss how the proper use and care of the home, its furnishings, and equipment will reduce maintenance and repair costs.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Work with your family to find ways to reduce home operating and maintenance costs. Examples: making regular checks of equipment, following manufacturer's instructions in use of equipment, cleaning regularly, and painting and repairing as needed. Put some of your suggestions into practice. Present to the class your plan to minimize home operating and maintenance costs.
b. Furnishings and equipment	Brainstorm to name and list basic home furnishings and equipment needed for a first home. Use catalogs to identify price ranges for the basic furnishings and equipment listed. Cite factors that may affect the life expectancy of various items of furnishings and equipment. How can an understanding of the financial aspects of selecting furnishings and equipment contribute to wiser use of money and increased satisfaction with purchases?
	Give examples of factors which may influence the portion of family income to be spent on furnishings and equipment. Examples: amount of income, personal credit, stage in family life cycle, values, other financial responsibilities, and number of family members.
	Divide into small groups. Use credit contracts from department or furniture stores, finance companies, full-service banks, or credit unions to show costs of financing the purchase of $2,000 of furnishings and equipment for a couple moving to an unfurnished apartment with range, refrigerator, and draperies provided. [NOTE TO TEACHER: Students can also list furnishings and equipment needed to establish a first home. They should compute the cost of obtaining the items. If they do not anticipate having sufficient resources for obtaining the items all at once, they will need to find ways to reduce the costs, substitute less expensive items, or delay purchase of some items. Students can share ideas with classmates.]
2. Maintenance costs a. Money-saving methods	Illustrate various do-it-yourself home furnishings projects from pictures in magazines or from personal experience. [NOTE TO TEACHER: Students might bring to class examples of do-it-yourself projects or picture of projects they or members of their families have completed.] What skills may be useful in do-it-yourself home furnishings projects? Estimate cost, time, and energy required in each project. Discuss why the feasibility of do-it-yourself projects depends upon the skills, tools, equipment, time, and energy available.
	Predict the cost of specific furniture remodeling projects. Compute the cost of remodeling a piece of furniture by preparing a list of the expenses anticipated in doing the

project. Obtain needed information by talking with salespeople in hobby shops or hardware stores, with acquaintances who remodel furniture as a leisure time activity, with cabinetmakers or carpenters, or by studying appropriate references.

List simple furniture repairs which may be made at home such as gluing a broken chair leg or patching a hole in upholstery. Discuss how money may be saved by making simple repairs at home. Discuss situations where it would be best to hire someone to do repairs. Why may some home repair projects not lead to a savings?

Study references and conduct interviews to learn procedures for making the repairs listed above. Explain to the class the steps in making a specific repair. [NOTE TO TEACHER: Students might complete repairs on a piece of furniture at home. In a report to the class students can describe the completed project, including steps involved and time and money spent. They might also interview professional furniture repairpersons to discover the cost of having the simple repair done professionally, compute the amount of money saved by doing the repairs themselves, and include the information in the report to the class.]

b. Renovation and remodeling

Brainstorm to identify types of renovation and remodeling. Classify as installation of new materials and equipment, rearrangement of space inside the house, or addition of new rooms. Discuss how renovation and remodeling can bring the housing unit up-to-date.

Interview a home remodeling consultant to obtain examples of the costs of different types of renovation and remodeling projects. Share your findings with classmates.

Listen to a person who has recently remodeled a home explain the costs of remodeling. Why was the decision made to remodel the home?

Examine remodeling ideas found in magazines or other resource materials. Consider time, money, skills, and other resources to determine the feasibility and costs involved in the remodeling plan. Will the expense of this project be justified by the satisfaction received? Analyze the remodeling ideas and share with classmates.

c. Home repairs

Brainstorm to list housing repairs. What equipment may be needed to make repairs? Discuss how home repairs are a necessary part of home maintenance. Describe home repairs that you have helped make. What other home repairs are frequently necessary? Which of these may the family be able to make? Discuss the effects of negligence in home repairs. Describe factors to consider before making home repairs. Examples: cost; tools, skills, and time required; and whether to do-it-yourself or contract the job.

Work in pairs to show the class how to make selected home repairs. Examples: replace the washer in a leaky faucet, relieve a clogged drain, adjust a gas pilot, repair a screen or window shade, and drive a nail.

Analyze given home repair projects. Determine the cost of doing-it-yourself and having it contracted. Is money the only resource expenditure to be considered? Why?

d. Yard care

Select pictures of housing with well-planned landscaping and housing in need of yard care to discuss with classmates. Include examples representative of middle and low income levels. Discuss the importance of yard care. What are the characteristics of a well-planned yard? Discuss how attractive landscaping contributes to the beauty of the home and the neighborhood, the value of the home, and the enjoyment derived from it.

Describe possible reasons for poorly kept yards. Suggest alternatives for people who lack interest, skill, or money to care for yards. Examples: rock gardens, apartment living, and cement play areas. Give examples of care necessary for yards. Discuss weekly and occasional yard care tasks.

Survey a home to find examples of yard care equipment. Describe other types of commonly used yard care items. Relate yard care equipment needed to styles of landscaping. Share findings with the class.

Listen to a resource person from a nursery, garden center, or the extension office show procedures for lawn care. Include fertilizing, watering, mowing, and weed control. Describe factors to consider when selecting grass. Examples: soil, temperature, annual rainfall, and care required.

Study selected pamphlets and resources to discover easy yard care projects. Discuss the yard care projects with classmates. Which projects might be adapted for the yard at your home? [NOTE TO TEACHER: Students might carry out a yard care project at home. They can describe the project in a report to the class and explain the new procedures learned. Students can also start plants in cans at school using seeds or cuttings. These

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	plants could be used later in home or school beautification projects.]
e. Routine care	Define *routine care* of housing. Name tasks included in routine care. Make a class list. Are these tasks performed on a regular basis? Study resources to identify factors which may influence the routine care of housing. Examples: standards, type and quality of furnishings, skills, living patterns, and available equipment. Explain how each factor may affect routine care. Interview homemakers to discover suggestions for routine care of a home. Share ways of planning routine care. Prepare a schedule for routine care which may provide efficiency and satisfaction. How may routine care be accomplished without monotony? Predict changes in routines of family members in caring for the home when a homemaker goes to work for the first time. How may young children, teenagers, and working parents contribute to routine care? Point out the importance of home maintenance. Discuss how order and beauty in the home influences physical, mental, and emotional health. Determine your reactions to extremes of orderliness in an environment. Cite ways home maintenance extremes may influence physical, mental, and emotional health. Complete the following statements in reference to routine care of the home: "When parents work, children should . . . ." "If a couple works, both spouses should . . . ." "If a parent stops work, the rest of the family . . . ." How do the completed statements reflect individual class member's values and attitudes toward routine care of the home?
f. Occasional care	Brainstorm to identify occasional household tasks. Examples: cleaning windows, shampooing carpets, and repainting. Summarize home care procedures for an occasional home maintenance task such as painting or carpet cleaning. What alternative procedures may the family choose? What are advantages and disadvantages of each procedure? Investigate the cost of hiring professional help for occasional care jobs, such as window washing or carpet cleaning. Report findings to the class.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Investigate various alternatives suitable for occasional care tasks. Study pamphlets, books, and magazines to learn correct methods for various procedures. How may product labels be of value in determining methods of use? Demonstrate the correct use of procedures and equipment for specific tasks. Study the results of each method used. Determine which method is most satisfactory for each task. Consider time and energy as well as costs involved.
g. Community responsibility	Listen to a city park engineer explain restrictions applicable to home care and maintenance. Discuss the importance of accepting community responsibilities. What is the role of home care and maintenance in your community? Are home care and maintenance the responsibility of all community members? How may community members work to improve neighborhoods? Survey your community by taking a walking tour. Report the location and nature of improvements being made in your community. Describe other improvements that have recently been made. Associate specific community improvements, such as landscaped boulevards, parks, and street lights, with benefits you personally receive from them. Describe improvements which need to be made in your community. Find out if there are any plans for the improvements and how they will be carried out. How may you help? Share findings with classmates. [NOTE TO TEACHER: For an FHA/HERO community activity, students might prepare a project to improve the school or community. Examples: sponsor a cleanup day; collect cans from roadways or plant flower seeds; landscape a public area, or plant and care for red roses near the home economics department as an FHA/HERO project.]
h. Family responsibility	Study references to learn who is most frequently responsible for given tasks in the home. How does your family differ from this pattern? Why? List factors which may influence who is responsible for given tasks in the home. Examples: family composition, resources, values, and goals. Discuss the following questions: How is the age of family members who share in routine care related to their level of skill? How may the size of the family influence routine care? How may the number of rooms influence routine care? What other factors may influence who is responsible for certain tasks? Examples: outside employment, or money available for cleaning supplies, equipment, and services. Give examples to illustrate each question posed. Discuss how men's and women's roles in assuming responsibility in the home have changed in this century. De-

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

scribe jobs done around the home by your father, uncles, or brothers that your grandfather has never done. Discuss the effects on family life style of the fact that the family has changed from a producing to a consuming unit. Point out ways in which leadership in care of the home affects the attitudes of children. How may pride and satisfaction be created from a job well done? Determine the benefits various family members derive from all members sharing in home maintenance. Examples: increased leisure time and less fatigue.

Work with your family to develop a one-month plan for sharing home maintanance responsibilities. Work together to follow the plan. Report the results to the class.

COMPETENCY: *Ability to relate the selection and arrangement of home furnishings to the elements and principles of design*

SUB-COMPETENCIES: *Interpret the importance of design in home furnishings.*

Describe the kinds of design.

Apply the elements and principles of design to the selection and arrangement of home furnishings.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
VII. Design in Home Furnishings A. Importance of design	Explain the importance of design in one's life. List three objects in your home that you like. Describe the design of each object and the reason you like it. Discuss how the design of an object influences its beauty, usefulness, and durability. Brainstorm to describe ways that design affects your life. How did your descriptions differ from those of other class members? View selected pictures of room settings to identify specific designs which indicate personalities, attitudes, and values of particular family members. Describe ways design may be used to express personalities, attitudes, and values. For example, design in furniture may indicate an outgoing personality, a desire for simplicity or ornateness, or an appreciation of quality. Select a picture of a room you feel is "you." Discuss ways the designs in the room setting express your personality, attitudes, interests, and life style.
B. Kinds of design	Study selected references to learn to recognize the kinds of design. What is the main objective of structural design? What is the purpose of decorative design? Define the following classifications of decorative design: *naturalistic* or *realistic, conventional* or *stylistic, abstract,* and *geometric.* [NOTE TO TEACHER: The styles of design are illustrated on Teaching Aids 27 and 28.] Work individually or in small groups to assemble a collection of home furnishings accessories in various price ranges. Divide the accessories into groups according to kind of design. Explain the design groups to classmates. Can an accessory show both structural and decorative design? Explain. Can an accessory exhibit more than one type of decorative design? Explain. Examine furnishings in the home economics department to determine how the different kinds of design may be used. Which objects exhibit only structural design? Which objects have decorative as well as structural design? Do some objects have only decorative design? Explain.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Find illustrations of items of similar function and cost to demonstrate ways the kinds of design are used in home furnishings. Examples: vases, lamps, or tables. Discuss the illustrations with classmates. What is the relationship between cost and amount of decorative design? What is the relationship between cost and the appropriateness of structural design? How is the beauty of an object affected by an excess of decorative design? Study a home furnishings object exhibiting both structural and decorative design. How is the object functionally affected by its structural design? by its decorative design? Is the decorative design naturalistic, abstract, or conventional? Does the decorative design enhance or detract from the structural design? Why? Is the type and amount of decorative design appropriate for the object? Analyze the use of design in the object in a report to the class.
C. Elements and principles of design	View Teaching Aids 29-41 to test your knowledge of the elements and principles of design. As the teacher shows each teaching aid, determine as a class what element or principle of design is being represented. After identifying the correct answer(s) on each teaching aid, discuss the term(s) identified and give other examples for the term(s). [NOTE TO TEACHER: Teaching Aids 29-41 can be used for a pretest. *Answers.* TA-29, space; TA-30, form; TA-31, 1) line, 2) vertical lines, 3) horizontal lines, 4) diagonal lines, 5) curved lines; TA-32, texture; TA-33, 1) red, yellow, blue, 2) orange, green, violet, 3) red-violet, red-orange, yellow-green, yellow-orange, blue-violet, blue-green, 4) white, 5) black: TA-34, proportion; TA-35, balance; TA-36, bisymmetrical balance; TA-37, asymmetrical balance; TA-38, radial balance; TA-39, 1) rhythm, 2) radiation, 3) opposition, 4) repetition, 5) gradation, 6) transition; TA-40, emphasis; TA-41, harmony (or unity).]
1. Elements of design	Read selected references to identify the elements of design. Name and define each element of design. Discuss each element. Brainstorm to identify the types of lines. Draw the different types of lines on the chalkboard. Make a list of words describing how each of the types of lines make you feel. Examples: excited, active, quiet, or restful. Describe ways in which these kinds of lines are used in home furnishings and housing. What is your reaction to line direction? View pictures illustrating various shapes of home furnishings. Describe the psychological effects of each shape. What does each shape remind you of? What shapes

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	convey different feelings? Examples: femininity, masculinity, and movement. What is the relationship between shape and line? Which is the most basic to design? Are shape and form the same? Explain.
	Read selected references to gain a better understanding of the color wheel. View Teaching Aids 43 and 44 to identify the types of color schemes. Discuss what is meant by a related color scheme. Define *monochromatic color scheme* and *analogous color scheme.* Give an example of each. What are the names of the contrasting color schemes?
	View a film or filmstrip illustrating color use in room interiors. Discuss the psychological atmosphere created in the room by its color scheme. How may color schemes affect activities taking place in a room?
	Find examples in magazines or catalogs of the effect of light on color. Can you see color without light? Which colors absorb light? Which colors reflect light? How does color affect the amount of light reflected in a room? How may different types of lighting affect various colors? Find examples of artificial and natural lighting used effectively to enhance the color of the furnishings in a room.
	Make a sheet of rubbings using a pencil and a piece of paper to gain an understanding of different textures. Place the paper over a surface and lightly rub with a pencil. Make each rubbing on the paper approximately 2" square and continue until the paper is full of textures. Examples of rubbings include a bulletin board, wall, cabinet, or a desk.
	Work in small groups or in pairs to identify the textures shown on classmates' papers. Can you identify surfaces in the room by seeing the textures on paper? What sense besides sight is necessary to identify textures? Feel various textured items and describe your feelings of each. [NOTE TO TEACHER: Items could include carpet, vinyl, satin, velvet, sandpaper, wood, burlap, sponge, or wallpaper.]
2. Principles of design	View Teaching Aids 18-23 to identify the principles of design. Define *proportion, formal* and *informal balance, unity, emphasis, scale,* and *rhythm.* Discuss each principle as it relates to a simple object or to a more complicated situation in home furnishings. How does correct or incorrect usage of the principles of design affect the beauty of a room's decor? Why does use of the elements of design with the principles of design achieve aesthetically pleasing results?

Associate the use of the principles of design with the attractiveness in a given room. An example could include the living room in the home economics department. Point out the evidences of proportion, balance, emphasis, rhythm, and unity. Which principle of design do you notice first? Does one principle dominate the room? Why is a room without unity a confusing combination of parts?

Look in magazines or books to find pictures of household items, equipment, or furniture that represent good or bad examples of the principles of design. Discuss how arrangement can affect a good or poor utilization of the elements and principles of design.

3. Arranging furniture
   a. Using elements of design
   b. Apply principles of design

View Teaching Aid 45 on variations in furniture arrangements. Which arrangement would be the most appropriate for conversation? for studying? for reading? How are the principles of design utilized in each of the arrangements?

View the furniture arrangement shown on Teaching Aid 46. Using the same floor plan and furniture items, rearrange the room using the elements and principles of design. [NOTE TO TEACHER: One possible furniture arrangement is shown on Teaching Aid 47.]

Review the elements and principles of design. Work individually or in small groups to apply these elements and principles to solve given decorating problems in room plans. Examples include radiators that are not concealed, window air conditioners, built-in book shelves, unrelated furniture pieces that are used within one room, and areas of carpet that show wear.

Look through books and magazines to find pictures of rooms in which furniture has been arranged according to principles of formal and informal balance, analogous color scheme, decorative unity, unity of design, etc. Discuss ways in which the elements and principles of design are achieved in the various room designs.

Draw or sketch on one-half of a poster board the floor plan of a room in a home you are very familiar with. Include the furniture items as they are now arranged. Draw an identical floor plan on the other half of the poster showing the furniture items rearranged so as to get the maximum usage of natural lighting for such things as reading, studying, working, cooking, hobbies, etc. Why is it important to consider lighting when arranging furniture?

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Display your furniture arrangements by hanging the posters on walls around the room. Observe your classmates' arrangements. Make positive suggestions to improve the efficiency of arrangements.
4. Arranging accessories a. Using elements of design b. Applying principles of design	Brainstorm to identify guidelines for arranging different types of accessories such as pictures, mirrors, shelves, and clocks. Make a class list of the guidelines.
	Invite a resource person to illustrate different ways of arranging fresh, dried, and artificial flowers to be used as accessories. How are the elements and principles of design used in flower arrangements?
	Using objects displayed on a table, make or arrange an accessory to make an artistic statement. Remember to keep in mind the elements and principles of design. In what ways can the objects be arranged to produce different feelings? [NOTE TO TEACHER: Arrange various sized objects randomly on a table for students to use in making accessories.]
	Look at pictures in magazines or books of rooms in which many accessories are used. Determine how they make you feel. Defend the statement "When in doubt, it is better to underemphasize than to overemphasize." Associate over-accessorizing a room to "overdoing" in other aspects of life, such as wearing too much makeup or too much jewelry. What feelings or moods do such situations provoke? Why?
	Design wall arrangements for a given room in a house using a handout provided by the teacher. The wall arrangement may be for a hallway, living area, dining area, or bedroom. Place the arrangements on paper or poster board to be displayed to the class. Discuss each arrangement for correct utilization of the elements and principles of design. [NOTE TO TEACHER: The handout can be duplicated from Teaching Aid 112. Students can trace or cut on the handout for sample sizes of wall arrangements.]

COMPETENCY: *Ability to determine factors to consider in selecting home furnishings and equipment*

SUB-COMPETENCIES:

Identify characteristics of household textiles.

Select household linens.

Select window treatments for various types of windows.

Select various types of floor coverings.

Obtain furniture.

Select major home appliances.

Obtain accessories for the home.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
VIII. Selecting Home Furnishings and Equipment A. Household textiles 1. Fibers, fabrics, finishes	Review the characteristics of synthetic and natural fibers Identify the ways fibers, yarns, fabrics, and finishes influence the properties of a textile product. Define *nonwoven textiles.* What materials are commonly used in making nonwoven textiles? What are the characteristics of nonwovens?
	Bring samples of household textiles to class. Discuss differences in appearance, content, and construction of the textiles.
2. Fabric care and selection	Brainstorm about factors to consider when selecting textiles for the home. Examples: cost, care required, style of furnishings, intended use, color, and pattern. Summarize the advantages and disadvantages of appropriate fabric care. Why is fabric care important to the life of the textile? Does the care of the fabric influence the type of textile selected?
	Divide into two teams and play a textile game to gain a better understanding of textiles and their characteristics. As the teacher holds up a textile name card, teams' members will take alternate turns naming an advantage or disadvantage of the textile. When a team cannot give an advantage or disadvantage the other team will be given a chance to answer. Teams will receive one point for each correct answer. The team with the high score is the winner. [NOTE TO TEACHER: Cards for the textile game can be made by writing the names of textiles on index cards. Be sure to set a time limit for the game.]
B. Household linens	Brainstorm to identify the types of household linens. Give examples of each type. View examples of woven and nonwoven textiles used for household linens. Examples: muslin, percale, terrycloth, terry velour, damask,

polyester, cotton blends, plastic, and paper. Discuss elements to which household linens are exposed such as water, food stains, and grime. What characteristics must fabrics have to be suitable for given household linens such as bath towels, dish towels, tablecloths, and sheets?

Use catalogs or newspapers to obtain prices for each type of household linen. Determine the effect the fiber content has on the price of goods. What factors influence the cost of household linens?

C. Window treatments

View Teaching Aid 78 to identify the parts of a window. Discuss the functions of a window. Examples include light control, ventilation, heat loss or gain, and decoration. Why is it important to recognize the parts of a window when measuring for window treatments? Which part of the window can affect energy usage? What term is used to refer to the thickness of the glass? What are the advantages of using insulated, plate, or other types of glass?

Read selected references to identify the types of windows. What type(s) of windows are in the school? the gymnasium? your home? Are the windows movable or stationary? How can knowing the parts of a window and the different types of windows aid in measuring for window treatments? Why do different types of windows require different window treatments?

View Teaching Aids 79 and 80 to learn how to measure windows for various window treatments. Measure a common size window and a window that is irregular in shape or size. Sketch each window on paper and write the measurements of each window on the appropriate sketch. Indicate the type of curtain rod(s) to be used. Discuss why it is important to measure a window accurately before purchasing or selecting window treatments? How do the different types of window treatments affect the choice of a curtain rod?

From sample books, point out fabrics suitable for curtains in specific windows. Examples: bedroom, kitchen, living room, east or west windows. Is a sheer drapery best suited for a bedroom or kitchen window? Which fabrics would be suitable for a living room or a bedroom window? Why? What should you consider when choosing window treatments for east windows? Discuss the factors that affect the choice of fabrics suitable for window treatments. Examples: drapability, sheerness, ease of care, appearance, and resistance to fading, shrinking, or stretching. Describe some low cost window treatments.

CONCEPTS

LEARNING AND EVALUATION EXPERIENCES

Divide into small groups. Discuss the advantages and disadvantages of fabrics used for window treatments. Consider the following factors: cost, resilience, durability, colorfastness, soil resistance, aesthetic value, and light and heat control. Report to the class on the advantages and disadvantages of various fabrics.

View Teaching Aids 81-83 to identify different types of window treatments. Discuss the functions of window treatments. Examples: privacy, light and heat control, and aesthetics. What factors would be considered when purchasing or selecting curtains for a home or an apartment? Examples: reuse, durability, and the cost of custom-made, constructed at home, or purchased ready-made. Discuss how a low cost window treatment can be as appropriate as a more expensive window treatment.

Design a window treatment for a specific window style. Sketch the design and select fabric samples suitable for the window treatment and style. Compile the steps taken to plan your design, and write the steps in general statements to use as a guideline for selecting all window treatments. Share this information with the class. [NOTE TO TEACHER: Students can plan the window treatment to fit a budgeted amount of money. Have the students draw slips of paper printed with a specific sum of money allowed for the window treatment.]

Complete a crossword puzzle to gain a better understanding of window treatments. [NOTE TO TEACHER: A crossword puzzle on window treatments is on Teaching Aid 84. Students may use selected references in determining the correct answers. Answers are: **ACROSS** 1. brackets, 2. padded, 3. cascade, 6. valance, 8. return, 10. ta, 12. shade, 13. opaque, 14. cornice, 17. install, 19. gather. **DOWN** 1. buckram, 2. pleat, 4. apron, 5. reverse, 7. lambrequin, 9. translucent, 11. frame, 15. Roman, 16. pull, 18. swag.]

D. Slipcovers and upholstery

Brainstorm to list items of furniture requiring slipcovers or upholstery. What properties are needed for slipcovers and upholstery fabrics? Examples: fabrics selected for slipcovers and upholstery need to be durable, comfortable to the touch, soil resistant, functional, and easily cleaned.

Select fabrics suitable to be used for slipcovers and upholstery. Find examples in fabric sample books, magazines, or catalogs. Show your fabrics in a report or display for the class. Discuss each report or display in class to see if the group agrees or disagrees with the fabric selected for the slipcovers or upholstery.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	Work in small groups or individually to plan the furnishings for a family room. Consider the following factors: floor covering, wall covering, furniture, window treatments, slipcovers or upholstery, and accessories. Sketch the dimensions and furniture arrangement of the room on graph paper. Find samples of the floor covering, wall covering, upholstery fabrics, and window treatments you choose. Draw or find in magazines or catalogs the accessories used in the room. Place all the samples and the room arrangement in a notebook or on a piece of poster board to present to the class. Be sure to consider the elements and principles of design.
E. Floor coverings	View [illegible] filmstrip or read selected references to identify [illegible]s of floor coverings available. Describe various [illegible]vering materials classified as soft or hard floor coverings. Examples: hard (brick, concrete, wood, resilient flooring, and ceramic tiles); soft (area rugs, indoor-outdoor, shag, and looped carpet). What is prefinished parquet floor covering? What are some of the characteristics of various floor coverings? Examples: durability, resiliency, cost, care required, composition, colors, patterns, and areas of use. Discuss the advantages and disadvantages of each floor covering.
	Work in groups to determine factors influencing the selection of floor coverings. Examples: amount and distribution of traffic, exposure to dirt and moisture, availability of resources for upkeep, degree of individuality sought, character of the structure, degree of formality desired, room decor, current trends, and the visual relation between floors, walls, ceiling, and the entire room. Choose one type of floor covering and determine how to select it, including methods of judging quality and how to measure the cost in relation to the upkeep required. Share your findings with the class. Use samples to help in your explanation.
	Survey magazines, community housing, and businesses selling floor coverings to discover recent trends in floor coverings used in housing. Are hard or soft floor coverings being used to a greater extent? Which hard floor coverings are used most often? which soft floor coverings? Which patterns of floor coverings are preferred? Predict reasons for the trends identified. Example: increased numbers of homemakers employed outside the home may have influenced the trend toward easy care floor coverings. Discuss: Which floor covering trends emphasize functional characteristics? aesthetic characteristics? How much emphasis should be placed on floor covering trends when selecting a product to meet the needs of a certain situation?

Interview a salesperson at a floor covering firm to summarize procedures for measuring areas for floor coverings. Estimate and report on how much information on measuring for floor covering is needed in shopping. Discuss the circumstances in which representatives from the floor covering store will come to measure rooms for floor covering.

From sample books choose three floor coverings for a given situation. Explain how the color, texture, and pattern of each will affect other elements in the same room. Which covering would be easiest to care for according to its purpose? Which is the least expensive of your choices? Which is the most attractive to you? Taking these questions into consideration, determine which of the three floor coverings would be the best choice for the given situation. Give reasons for your choice. [NOTE TO TEACHER: Sample books of floor coverings can be obtained from your local decorating studio or floor covering specialty store.]

F. Furniture

Brainstorm to develop class definitions of *traditional* and *contemporary* as they relate to furniture. Which style of furniture is predominant in your home?

View Teaching Aid 85 to identify various types of chairs in traditional and contemporary styles. Look through books and magazines to find other furniture styles. Discuss the importance of knowing the various styles. How may knowledge of furniture styles aid you in selecting new furniture? used furniture? antiques? How may it contribute to an understanding of adaptations of various styles?

View a filmstrip describing the characteristics of the various furniture styles. What characteristics have been carried over from past styles to present styles? What adaptations of past styles can you find? What changes were made to fit modern ways of living?

Divide into small groups or work individually to predict the functions of living room furniture for a given case study situation. Choose a style of furniture to meet the needs of the persons in the case study. Justify your decision to the class in an explanation of the problem and your solution to the problem. [NOTE TO TEACHER: Possible case studies are a young married couple—with three small children—that host social parties often to promote the husband's career; a middle-aged bachelor; an elderly couple who enjoy company; a person with a crippling disease or disorder such as arthritis, cerebral palsy, muscular dystrophy, etc., who lives alone; a newlywed couple with a limited income.]

Choose one type of furniture style to research and report on to the class. Determine the period of the furniture style and point out ways the history and life style of the period influenced the furnishings of that era. Use illustrations of the most outstanding features of the style in your class presentation.

Look through magazines or catalogs to identify and list space-saving and money-saving furniture. Discuss the need for such furniture. [NOTE TO TEACHER: Space-saving furniture includes multi-function, folding, and modular furniture; money-saving furniture includes do-it-yourself, remodeled, unfinished, and outdoor furniture.]

Assume you are moving into an unfurnished one-room apartment or dorm room. You are only allowed to take three pieces of furniture with you when you move. What three furniture pieces would you choose? Remember, you must have a place to eat, sleep, entertain, store items, and study/work. Give reasons for your furniture choices and how each would be used. [NOTE TO TEACHER: An example of three furniture pieces might be a couch which makes into a bed, a trunk to store items which can also double as a coffee table or window seat, and a drop-leaf table which could also double as a desk for studying or working.]

G. Equipment

View filmstrips to identify the variety of household equipment available. Examples: refrigerators, freezers, dishwashers, ranges, microwave ovens, trash compactors, food disposers, water softening and purifying equipment, clothes washers, and clothes dryers. Discuss ways equipment needs may be estimated. Consider such factors as environment, family composition, housing location, income, and employment. What kinds of equipment may be included with the sale or rental of a housing unit? Discuss kinds of electrical and gas equipment used in the home. Explain why gas equipment may be selected. Explain why electric equipment may be selected.

Discuss the effects of purchasing equipment not suited to space available in the home. Cite instances where location of household equipment influences use.

Divide into small groups or work individually to develop a check list for major appliances used in the home. Compare the size, features, and price of an appliance. Report your findings to the class. [NOTE TO TEACHER: Check

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	lists are located in current textbooks and in *Consumer Reports* magazine.] Discuss hidden factors to consider when purchasing a household item. Examples: Will the initial cost include additional wiring or plumbing? Will there be an installation charge? Will the item be delivered or will it have to be picked up by the purchaser?
H. Accessories	Read selected references to define the term *accessories* as related to home furnishings. State the meaning of *functional accessories, decorative accessories,* and *objects of art.* Discuss the types of accessories used in the home. Examples: pictures, lamps, mirrors, pillows, books, plants, clocks, and table-top accessories. Discuss the factors that affect the selection of accessories. Describe how these factors influence the selection of accessories. Give examples of accessories for which care required may outweigh the enjoyment gained. Discuss how accessories may become outgrown or outmoded.
I. Lighting	Read selected references to gain an understanding of lighting needs for the home. Consider such factors as tasks to be performed, safety, decoration, and prevention of eye fatigue. What parts do quality and quantity play in the function of lighting? How can inadequate lighting cause eye strain? Define *footcandle.* Discuss the light meter as the device used for measuring footcandles. Describe factors that vary the number of footcandles in any room or special area. Consider factors such as location and direction of light sources, reflective qualities of colors and textures, number of sources, and wattage of the bulbs or tubes. Brainstorm to list sources of light in various areas of the home. Sources include architectural lighting, fixtures, lamps, candles, fireplace, and natural light. What are possible uses of each light source? Name the major sources of artificial light. [NOTE TO TEACHER: Major sources are incandescent bulbs and fluorescent tubes.] How do lighted incandescent bulbs and lighted fluorescent tubes differ? What are the advantages of each? View Teaching Aid 90 to identify the types of lighting. Define *general, direct,* and *indirect lighting.* List sources of direct and indirect lighting. Sources of indirect lighting could include ceiling fixtures and open-top portable lamps. What are the purposes of general lighting? What are possible effects of inadequate general lighting? Discuss the types of diffusers. Name the methods of diffusing light. Examples of diffusing light are frosted bulbs, diffusion bowls, and translucent lamp shades. For

CONCEPTS | **LEARNING AND EVALUATION EXPERIENCES**

what tasks is general lighting necessary? How can the source of a room's lighting affect the decor? What light bulbs used in general lighting are not flattering to a person's skin? Why?

Brainstorm to define and list sources of specific lighting including floor lamps, suspended-fixture lamps, and high-intensity lamps. What are the purposes of specific lighting? What factors need to be considered when planning specific lighting? Factors might include source and amount of other light available, tasks to be performed in the area, beauty, and cost of various kinds of specific light. What tasks require specific lighting?

Compare light sources from several different sources such as a frosted bulb, a colored bulb, a cool white fluorescent tube, and a warm white fluorescent tube. Place the light source so you can compare the light from the bulbs to sunlight. How do they compare? Do all the bulbs have the same color of light? Shine all lights on a white surface and then shine the lights on a colored surface. What differences are there on the white surface? the colored surface? Why? Discuss the use of dimmer switches. How do they control lighting?

COMPETENCY: *Ability to develop guidelines for the selection of home furnishings and equipment*

SUB-COMPETENCIES:

Analyze consumer shopping plans.

Distinguish between informative and deceptive advertisements.

Point out the importance of product labeling.

Examine furniture construction as it relates to quality.

Judge advantages and disadvantages of methods of payment for home furnishings and equipment.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
IX. Consumer Buying of Home Furnishings and Equipment A. Shopping plans	Brainstorm to list the long-term and immediate considerations in planning for the selection of home furnishings and equipment. Discuss the relationship between immediate and long-term plans. How are they similar? different? How may immediate plans be part of long-term plans? Give examples of each. How will family needs affect shopping plans? How do plans for furnishing and equipping a home help families realize goals? Compare a long-range shopping plan with an immediate shopping plan. For each plan, determine problems, values, and projected outcomes of different solutions. Explain your final choice. Divide into groups or work individually to determine possible immediate and long-term plans for obtaining home furnishings for specific case studies. [NOTE TO TEACHER: *Examples of case studies:* Two friends moving into an unfurnished apartment and away from home for the first time; a young married couple who have just bought a two-bedroom house; a married couple, expecting their first child, moving into a three-bedroom rental house; a woman, recently divorced, with two teenage boys who now live in an unfurnished two-bedroom town house; an elderly couple who sold their large home and all its furnishings and moved to a small apartment in a retirement village.]
B. Buying guidelines	View Teaching Aid 91 to identifying some buying guidelines for home furnishings. What are some other guidelines? Are there exceptions to these guidelines? Explain. If yes, give examples. Give examples of questions to consider in buying home furnishings and equipment, such as the following: Will the item meet the purpose for which it is intended? Is the size appropriate for the family? What care is required? Is the quality appropriate for its proposed use

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	and to the life style of the family? Is durability necessary? Is special installation required? Will the item fit the space available? Is the item compatible with other furnishings?
C. Advertising	Listen to a representative of the Better Business Bureau or a consumer protection agency speak on advertising. Have questions ready to ask such as: What should I do if an ad gives false information? What options are available if I have been mislead in the purchase of a product? Identify advertising schemes used to deceive the consumer such as bait and switch, something-for-nothing, deceptive pricing, contests, and false labeling. Give examples of each. Work in groups, each group having one scheme, and present a role play according to the given scheme. Discuss each situation. What other fraudulent schemes are sometimes used? Brainstorm to list types of information the consumer may obtain from advertisements, such as brand names, prices, outlets for specific goods, special features of items, and new items on the market. Why is advertising not always the best source of information? Who controls the regulation of advertising? Make a collection of home furnishings advertisements. Point out the useful information given in the ads. Determine the emotional appeals used. Separate facts from the attention-getting devices. What is each ad trying to say to the prospective consumer? What additional information is needed by the consumer before making a decision to purchase each item?
D. Product labeling	Read labels from home furnishings and equipment. Cite types of information included on each label. Which federal agency controls labeling of furniture? Why is it important to know the fiber content of upholstered home furnishings? Visit a furniture store or department store. Examine label information on furnishings and equipment. Do all pieces of furniture and equipment have labels? If there is no label, is there an instruction book? What are other sources of information about the product? Describe labels found on furnishings and equipment. Write a short report about your findings and present to the class. Work in groups or individually to answer the following questions: What would happen if labels were removed from all furnishings and equipment on the market? What are the advantages and disadvantages of labels? Are labels influenced by outside factors? Explain.

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
E. Seals and warranties	Define *seal of approval, warranty,* and *guarantee.* Why are "warranty" and "guarantee" often used interchangeably? What are some seals of approval you often see on furnishings and equipment?
	Examine a warranty (or guarantee) from any piece of household furnishings or equipment. How long is the warranty in force? Are all parts of the equipment under warranty for the same length of time? What is the buyer's first obligation in fulfilling the terms of the warranty? Are warranties used in furniture sales? What parts of the furniture may be covered?
	Demonstrate through role play the usefulness of a warranty in a given situation. Example: a refrigerator which quits working while the warranty is still in force. What is the importance of comparing warranties before purchasing an item? Why is it important to understand all aspects of the warranty? Why should one read and save warranties and instruction booklets after an item is purchased? Discuss a good system, such as a filing system, to save all information about an item after it is purchased.
F. Evaluating quality and price	Read selected references on quality furniture. Point out key features indicating quality of home furnishings and equipment. Examples: design, construction, function, safety, and care. Analyze situations to determine the quality and prices suitable in home furnishings or equipment to meet the needs of an individual or family. When may it not be wise to purchase maximum quality?
	Work in groups. List on butcher paper the factors affecting the quality and price of home furnishings or equipment purchased by an individual or a family. Examples: resources, values, goals, standards, needs, and wants. Compile a class list. Explain how each factor influences purchases in specific situations.
	Discover the relationship between quality and price by observing two similar household items. Which item is superior in quality? higher in price? What is the relationship between quality and price in this situation? Observe a new set of household items showing a difference between quality and price. Summarize.
	Debate the following statement: "You get what you pay for." What are some instances where you might get more than you pay for?
G. Comparative shopping	Brainstorm to name the aspects of comparative shopping. Examples: shop several stores; ask questions; look at

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	prices, quality, features, warranties, and labels; inquire about installation, delivery, credit, and service charges. Why is it important to do comparative shopping? How does it increase the possibility of making a purchase which gives satisfaction?
	Construct a bulletin board of shopping tips. Examples: ask questions when you do not have answers, consider cost or your budget is lost, plan before you shop, shop before you buy. Show the usefulness of these tips in shopping situations. Discuss the advantages and disadvantages of comparative shopping.
	Visit or call a variety of stores selling new, used, or unfinished furniture. Compare the price, quality, construction, care, warranties, etc., of one type of home furnishing or equipment. From which store would you make your purchase? Why? Where else could you find used furniture besides a store? What are some of the advantages of buying used or unfinished furniture rather than new furniture? What are the disadvantages?
H. Construction	Read selected references on the construction of furniture. Identify the various construction techniques used in furniture. What is the difference between case goods and upholstered goods? What are indicators of better qualities in case goods? upholstered goods?
	Listen to a guest speaker from a furniture store speak on furniture construction. Ask questions such as: What is the most important construction feature to look for when purchasing case goods? upholstered goods? What are the different types of wood finishes? upholstery finishes?
	Examine the construction of a piece of furniture by obtaining a used upholstered chair or sofa and disassembling it to study the various components. Identify the upholstered parts and the types of joints, springs, etc. Would you consider this a quality piece of furniture based on its construction? Why? [NOTE TO TEACHER: Teaching Aid 86 will be helpful in identifying the construction components. Students may wish to draw a picture of the chair or sofa while disassembling it. Possible sources for the chair or sofa are: garage sales, junk shops, Goodwill stores, and donations from parents.]
I. Methods of payment	Brainstorm to list methods of payment for home furnishings and equipment. Examples: cash, installment loan, renting, leasing, adding to a home loan, etc. Discuss advantages and disadvantages of each. Name stages in the family life cycle where each way of obtaining home

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	furnishings would be especially feasible. Examples: expanding stage–young couple who rents furniture for a rental house; contracting stage–older couple who pays cash for new dining room furniture.
	Use Teaching Aid 113 as a worksheet to gain an understanding of the total cost of buying home furnishings. Complete the questions as given on the work sheet.
	Call or visit local furniture or department stores to find out what types of payment each accepts. How might the type of payment allowed influence whether or not you made a purchase? Do rental stores allow you the option of buying? How do interest rates differ among major credit cards, bank loans, and in-store credit?
J. Evaluating new products	Divide into two groups to examine design and function of new products. Analyze performance, appropriateness of design, and validity of product claims. Role play a salesperson-consumer situation. Have one group promote a product's positive features or claims in an attempt to "sell" the other team on a product. Have the other group point out both positive and negative aspects of the item in order to make a wise consumer choice. Alternate team roles in analyzing other products. Are the products the consumer groups decided to buy functional and well-designed? Do the new products replace other products? Are the replacements actually improvements? How are consumers influenced by the sales techniques? How may selling practices be affected if consumers are more knowledgable about products?
	Write a report evaluating a new product. Use as references consumer buying guides, magazines, and books. Include your opinion of the product in the report and also a picture if possible. Share your findings with classmates and determine their judgment on the new product.

COMPETENCY:

Ability to analyze career and job opportunities related to housing, home furnishings, and equipment

SUB-COMPETENCIES:

Examine career opportunities in housing, home furnishings, and equipment.

Identify factors contributing to employability in jobs related to housing, home furnishings, and equipment.

Evaluate job and career opportunities available in housing, home furnishings, and equipment.

CONCEPTS

X. Exploring Careers in Housing, Home Furnishings, and Equipment
   A. Career ladders

LEARNING AND EVALUATION EXPERIENCES

View Teaching Aid 114 illustrating the housing development cycle. Discuss the employment opportunities in each stage of the housing cycle. Relate how positions in one stage may affect positions in other stages. Give examples of how one job may depend on another.

Prepare a bulletin board identifying careers relating to housing, home furnishings, and equipment. Place a picture of a house in the center of the bulletin board. On colored strips of construction paper write down titles of jobs relating to housing, home furnishings, and equipment. Categorize the jobs as building and remodeling, home decorating, research, marketing, maintenance, and equipment repair. Assign a different color to each category. Pin titles on the bulletin board around the house.

View Teaching Aid 115 to identify careers related to the housing industry. Discuss which jobs require a certified license, a college degree, on-the-job training, or experience in other jobs. How can you learn what jobs are available and what requirements there are for them?

Study references to identify opportunities for skilled, semiprofessional, technical, and professional level jobs and careers in housing, home furnishings, and equipment. [NOTE TO TEACHER: Use such resources as *Dictionary of Occupational Titles* and *Occupational Outlook Handbook.* A guidance counselor or school librarian may provide additional information.] Which of these job opportunities exist in or near your community?

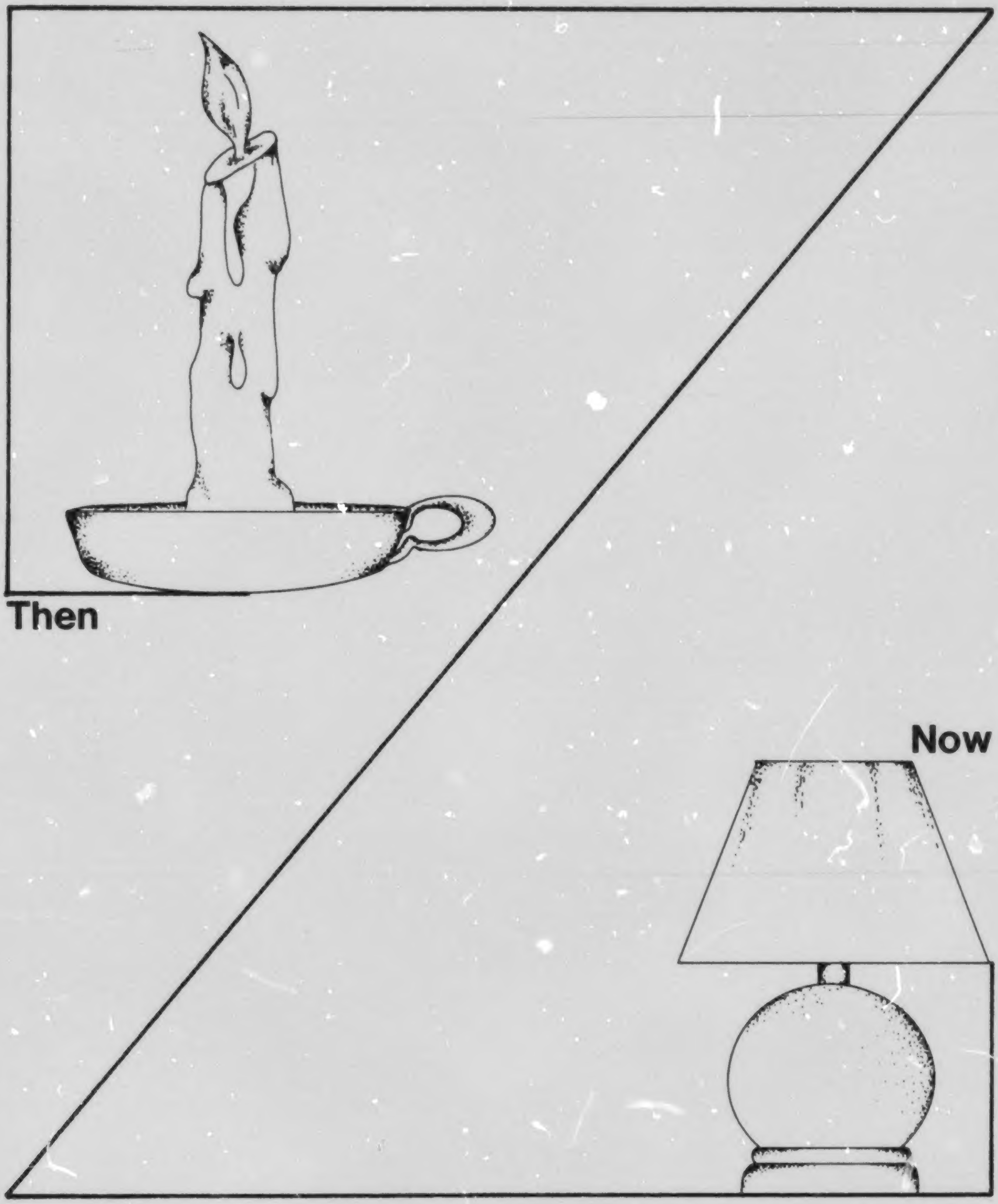
Listen to a panel of resource persons discuss job opportunities in the fields of housing, home furnishings, and equipment. [NOTE TO TEACHER: Include an entrepreneur of a housing, home furnishings, or equipment business on the panel.] What education and/or training would you need for the job(s)? What are the opportunities for advancement?

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
B. Personal qualities	Study references to identify entry requirements for a housing, home furnishings, or equipment occupation. Share your findings with the class. Compare entry requirements, and group jobs accordingly. Discuss personal attitudes and qualities needed by employees in the fields of housing, home furnishings, and equipment. Identify personal traits needed by persons who work in housing, home furnishings, and equipment jobs. Did your list include the ability to get along with people? good health? dependability? professional attitude? knowledge about housing, home furnishings, and equipment? Brainstorm to make a list of hobbies and interests you and your classmates have. Write the list on the chalkboard. Relate how the hobbies or interests could be helpful in working in any of the housing industry's work areas. Can you think of other hobbies or interests which could benefit you in such jobs? Give reasons why it is an advantage to have interests and hobbies which relate to your job. How may these activities improve your job skills and competencies? How can these activities help you choose a career?
C. Educational requirements	Identify educational preparation needed for various housing, home furnishings, and equipment jobs. What high school subjects would provide a good background for a housing, home furnishings, or equipment career? What post-high school training opportunities are available? Study college and university catalogs to identify training available for housing, home furnishings, and equipment occupations. Visit a campus, if nearby, to talk with counselors and program directors. Share your findings with the class.
D. Job and career opportunities	Look through the classified ads of a newspaper or in a professional housing-related magazine. Collect ads which relate to the housing industry. How many housing categories (decorating, building/remodeling, maintenance, equipment marketing) can you identify? Are any of the areas not represented? What does this indicate about available job opportunities? Check references to identify entry-level job opportunities which are related to housing, home furnishings, and equipment. Name the entry-level job opportunities available in your community. [NOTE TO TEACHER: An HECE student could speak to the class about entry-level jobs and about on-the-job training for a specific housing, home furnishings, or equipment job.]

CONCEPTS	LEARNING AND EVALUATION EXPERIENCES
	View pictures or slides of houses, furnishings, and equipment that are predicted for 10 to 20 years in the future. Compare the future houses, furnishings, and equipment to those of the present. Make a list of differences. Examples: home computers, solar heating, increase in neighborhood recreation, less privately owned recreational facilities. How would these changes affect the jobs needed to build and maintain a home? What jobs in today's job market would be eliminated in the future? Discuss how these predictions could affect students interested in a housing related career. Describe trends occurring in the typical family which affect housing. Examples: adults in two income families have less time to do housework, families who are transferred constantly may not buy a house or furnishings, etc. How will these trends affect the demand for jobs related to housing?

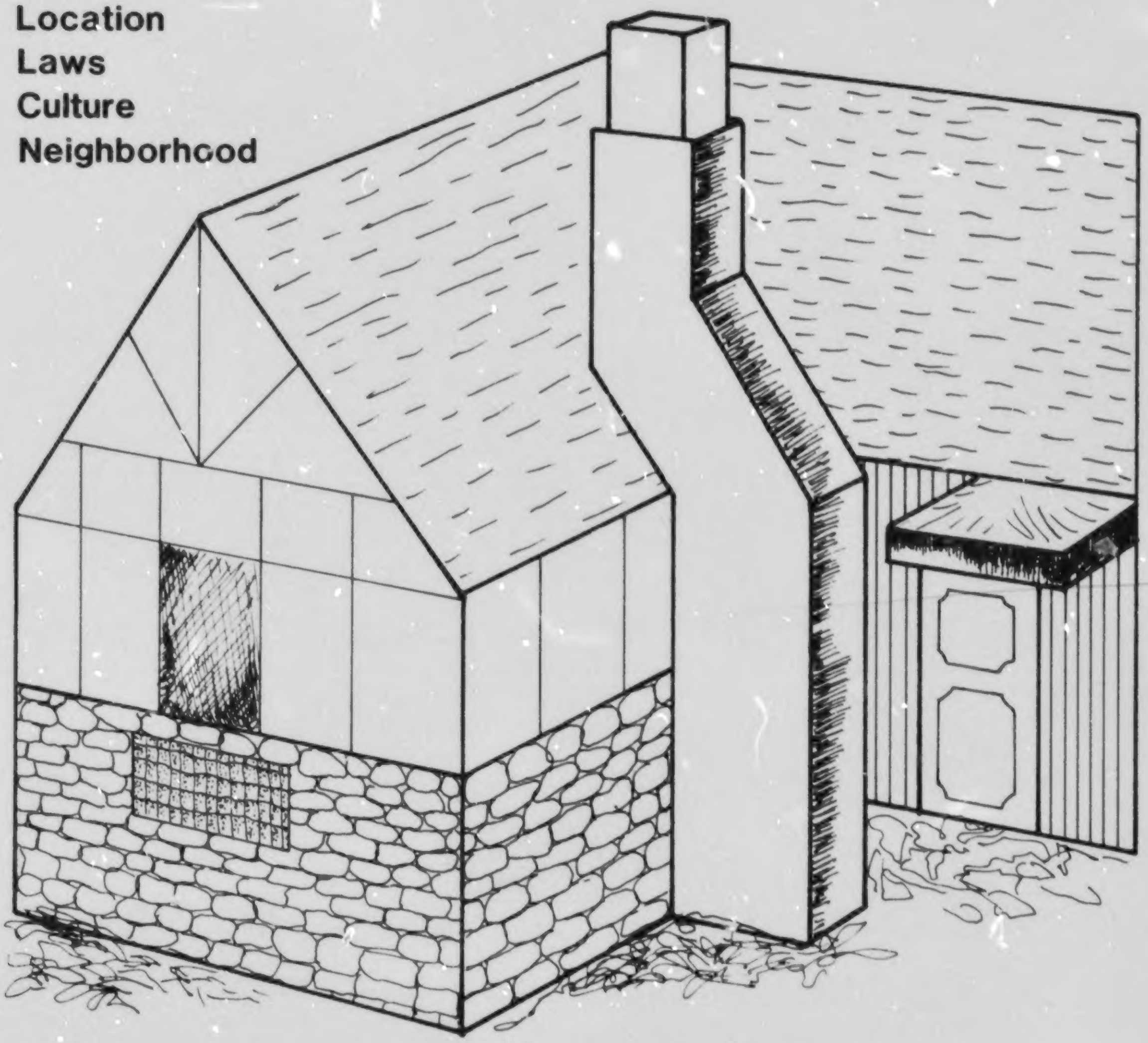
TEACHING AIDS AND REFERENCES

CHANGING HOUSING EXPECTATIONS



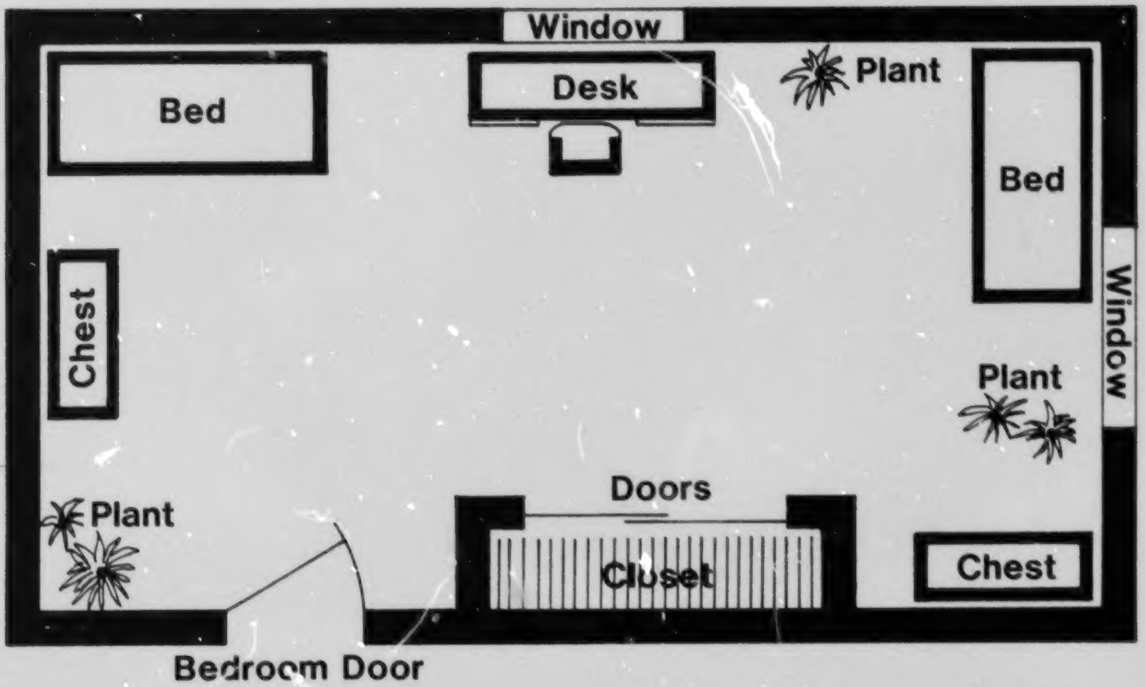
FACTORS OUTSIDE THE INDIVIDUAL WHICH INFLUENCE HOUSING

Space
Geography
Fuel Costs
Nature
Environment
Location
Laws
Culture
Neighborhood



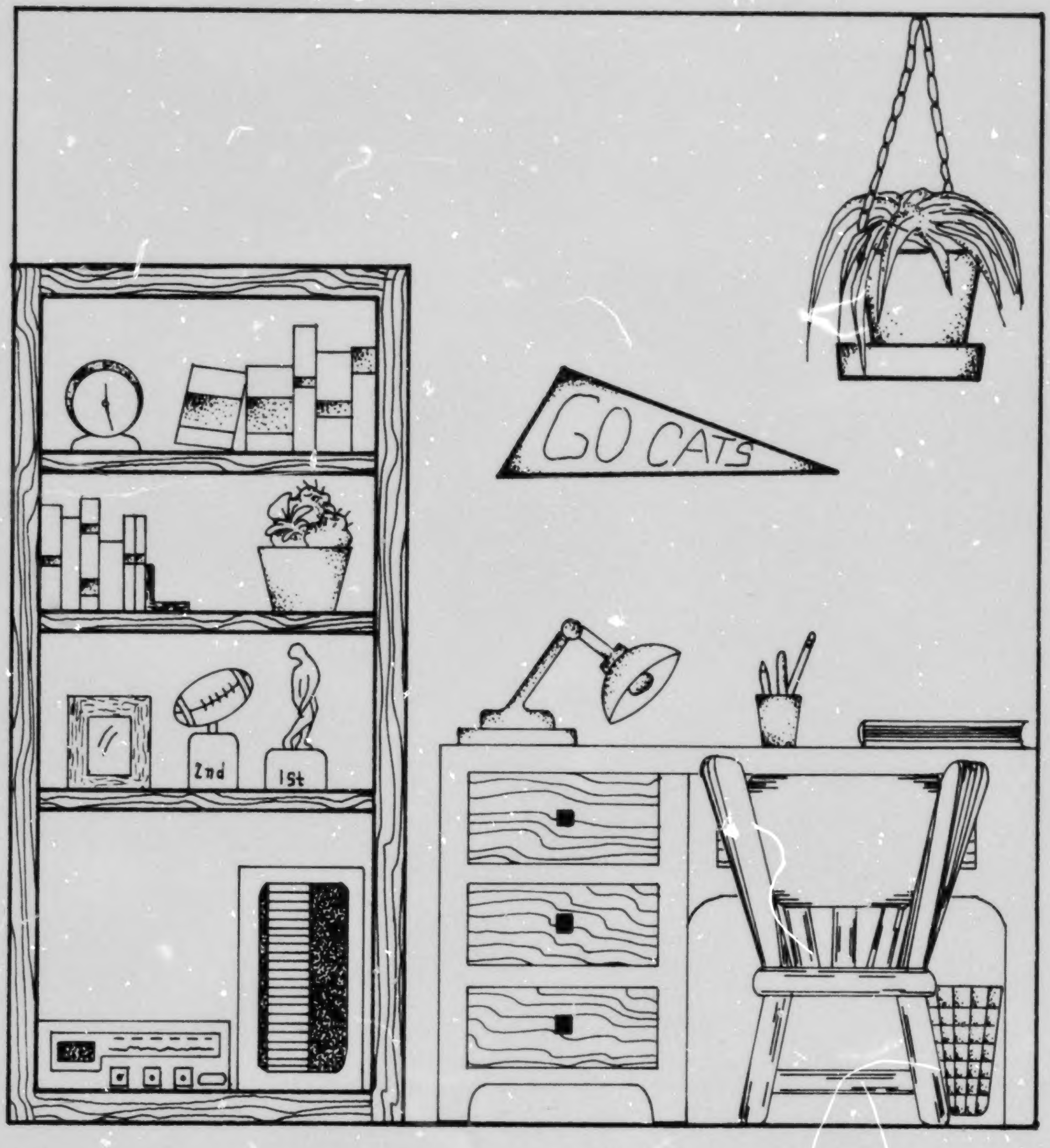
PLANNING AND ORGANIZING PERSONAL SPACE

Organize Personal Space on Paper for Best Results


Window
Bed
Desk
Plant
Bed
Window
Chest
Plant
Doors
Plant
Closet
Chest
Bedroom Door

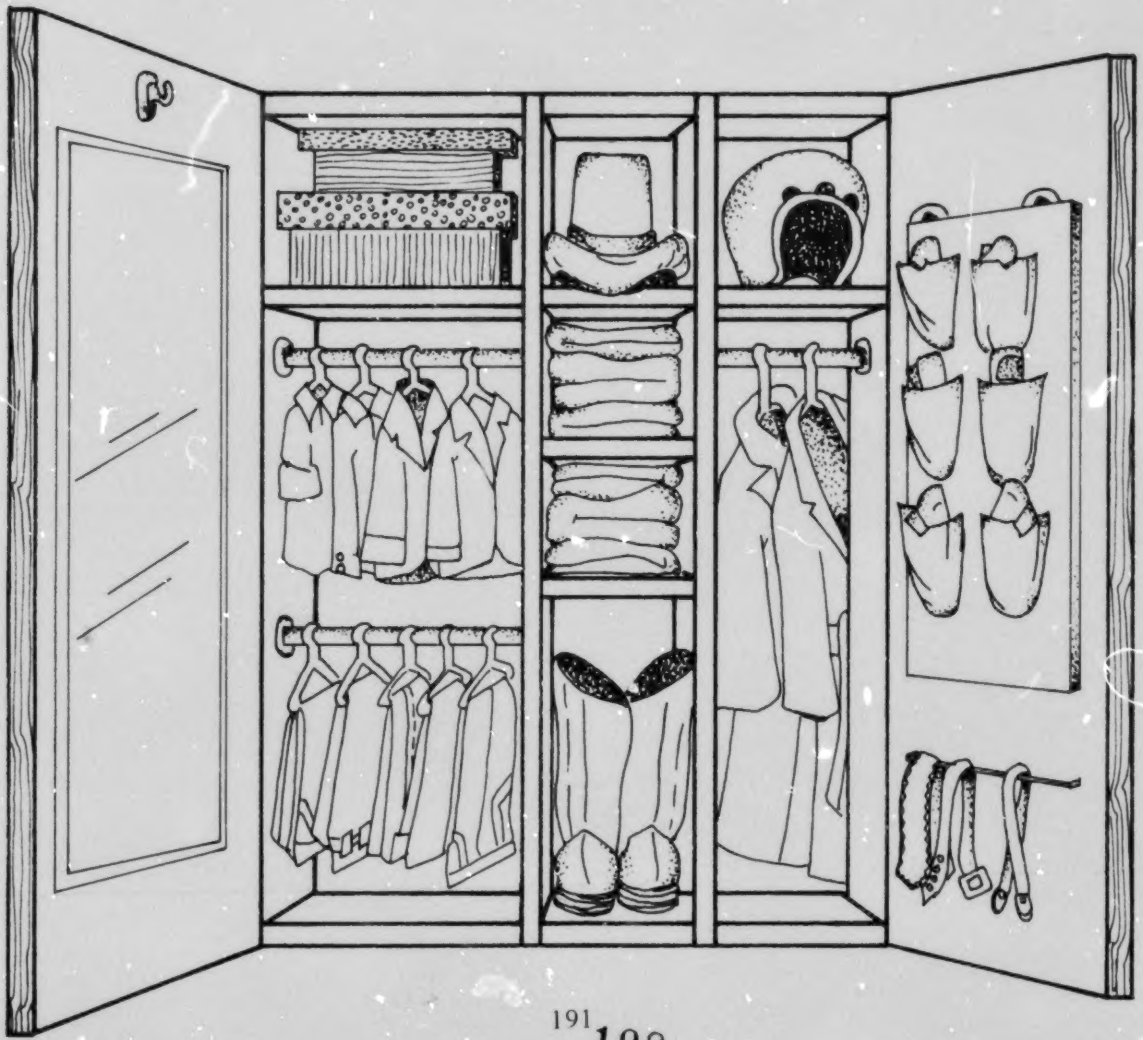
PLANNING AND ORGANIZING PERSONAL SPACE (CONT.)

Make Every Inch Count by Using Hooks, Baskets, Shelves, Etc.


GO CATS
2nd
1st

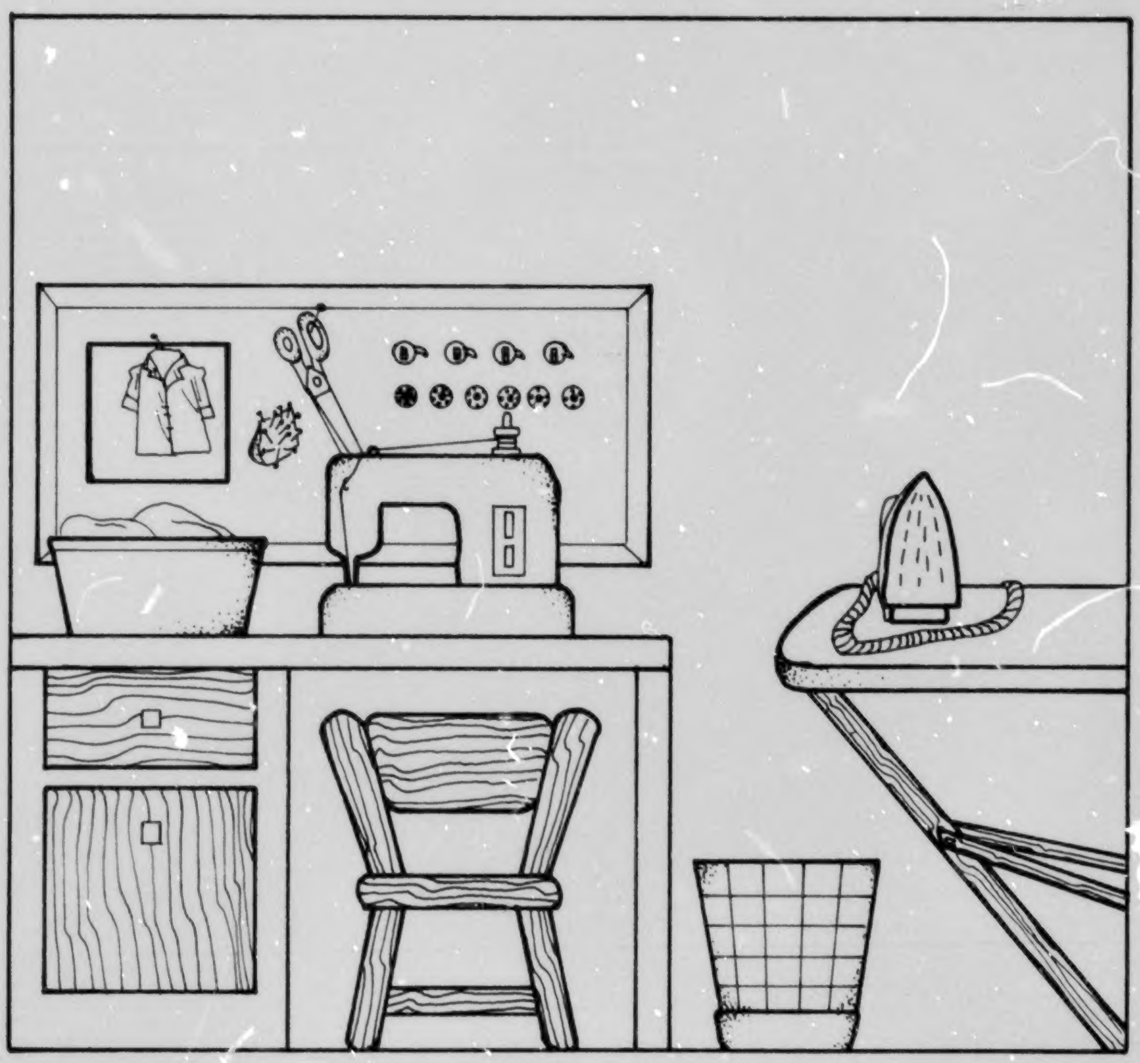
PLANNING AND ORGANIZING PERSONAL SPACE (CONT.)

Group Like Things Together



PLANNING AND ORGANIZING PERSONAL SPACE (CONT.)

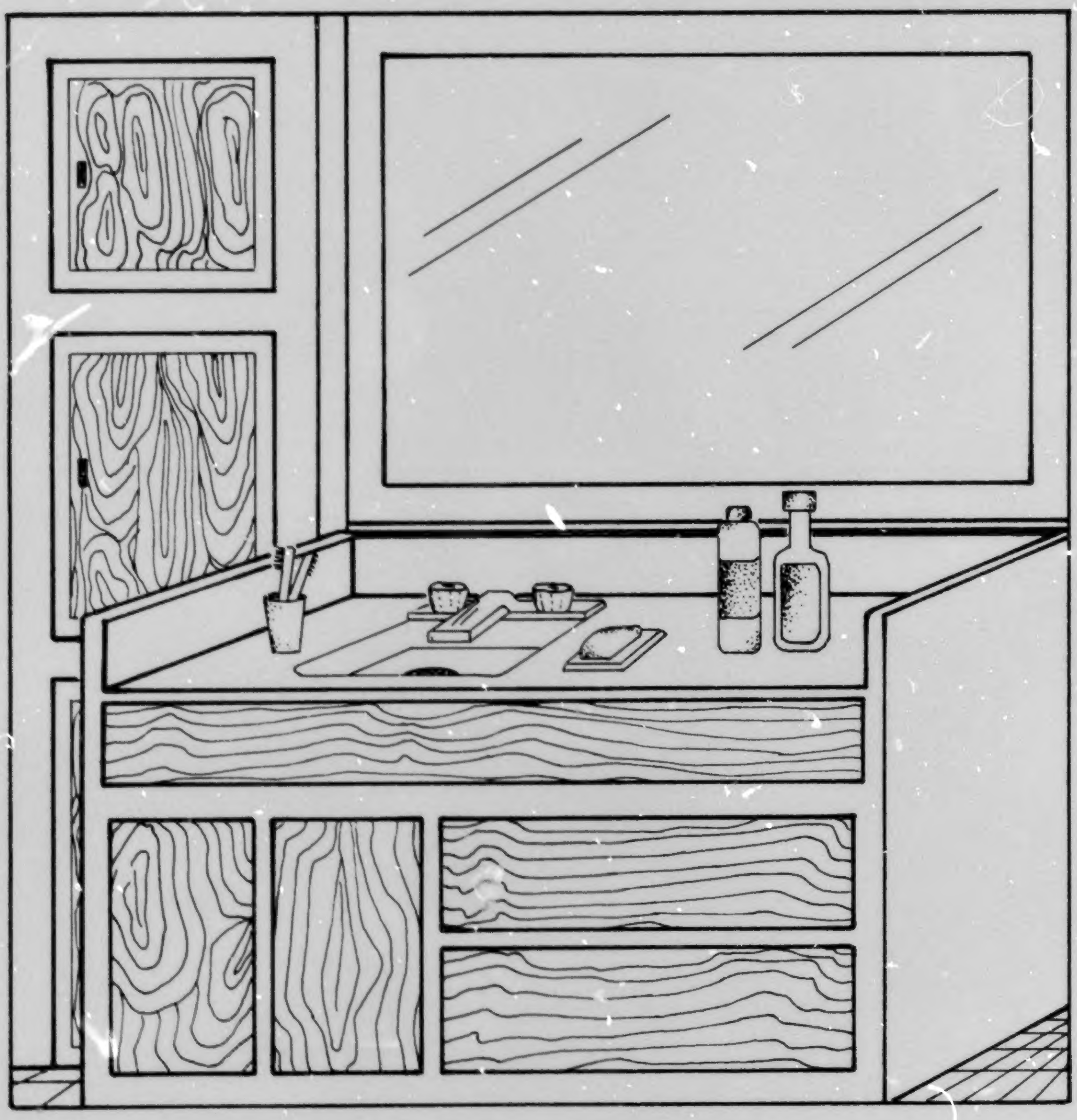
Keep Things Close to Where They Will Be Used



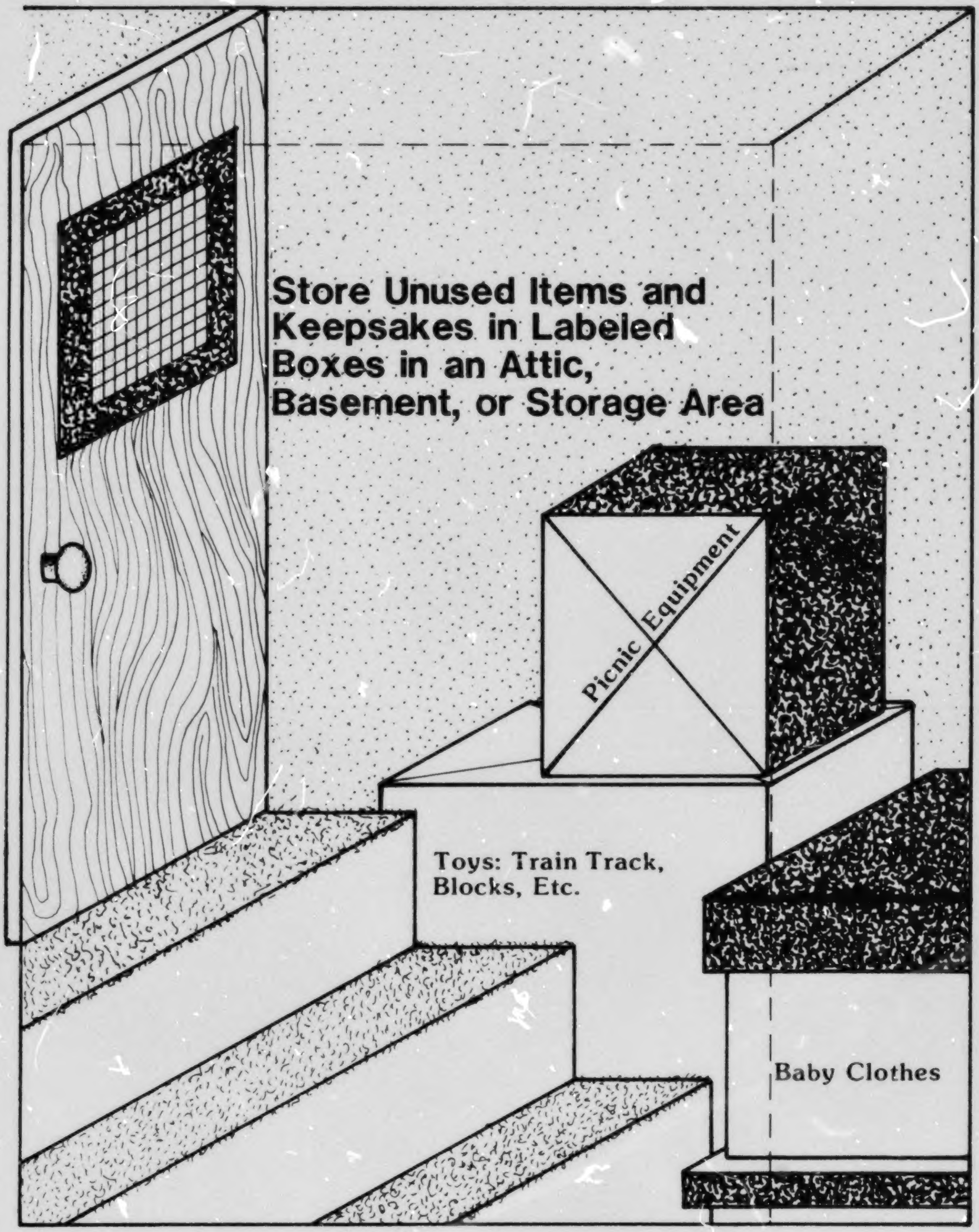
200

PLANNING AND ORGANIZING PERSONAL SPACE (CONT.)

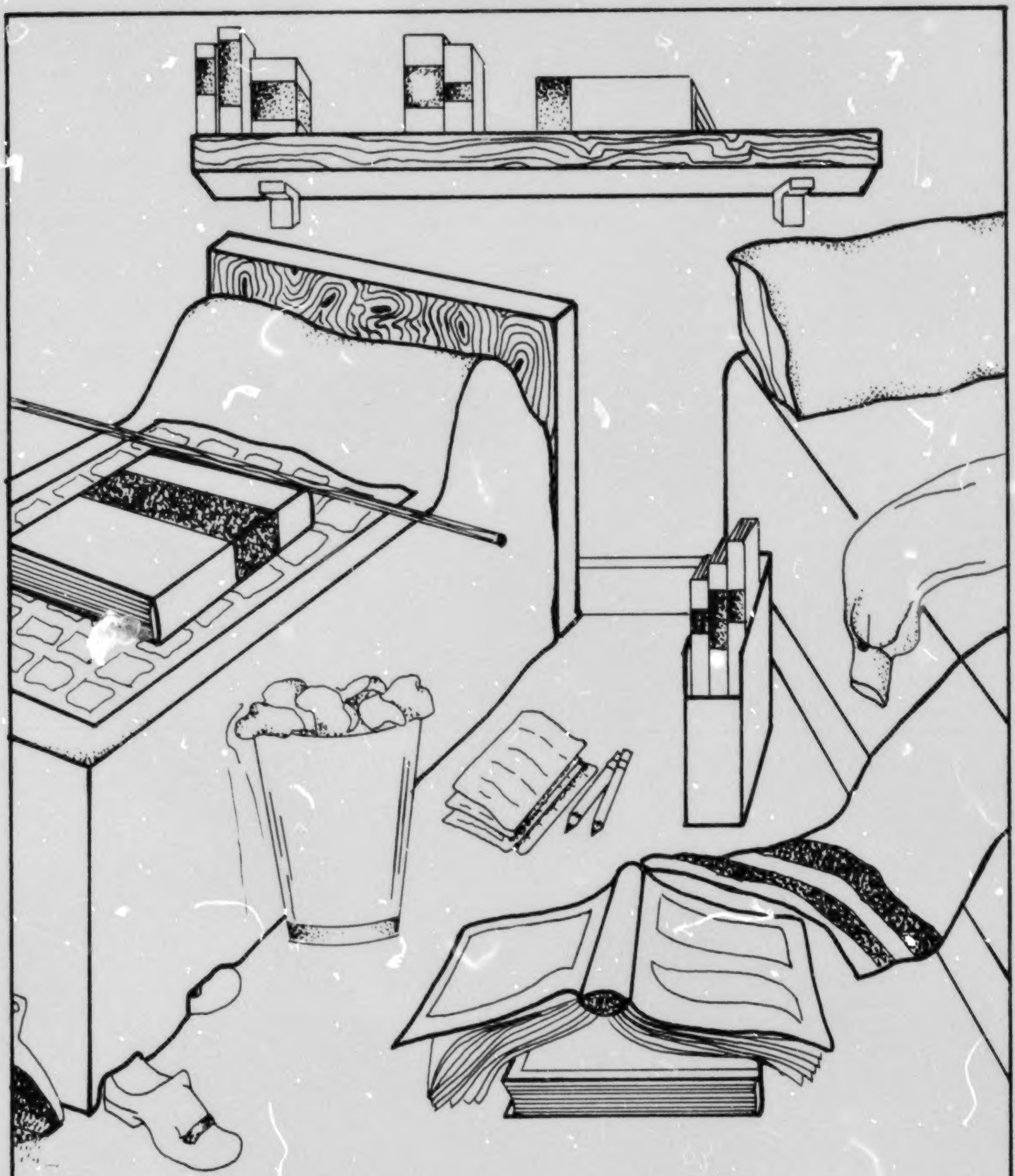
Items Used Most Often Should Be Easily Reached



PLANNING AND ORGANIZING PERSONAL SPACE (CONT.)


Store Unused Items and Keepsakes in Labeled Boxes in an Attic, Basement, or Storage Area
Picnic Equipment
Toys: Train Track, Blocks, Etc.
Baby Clothes

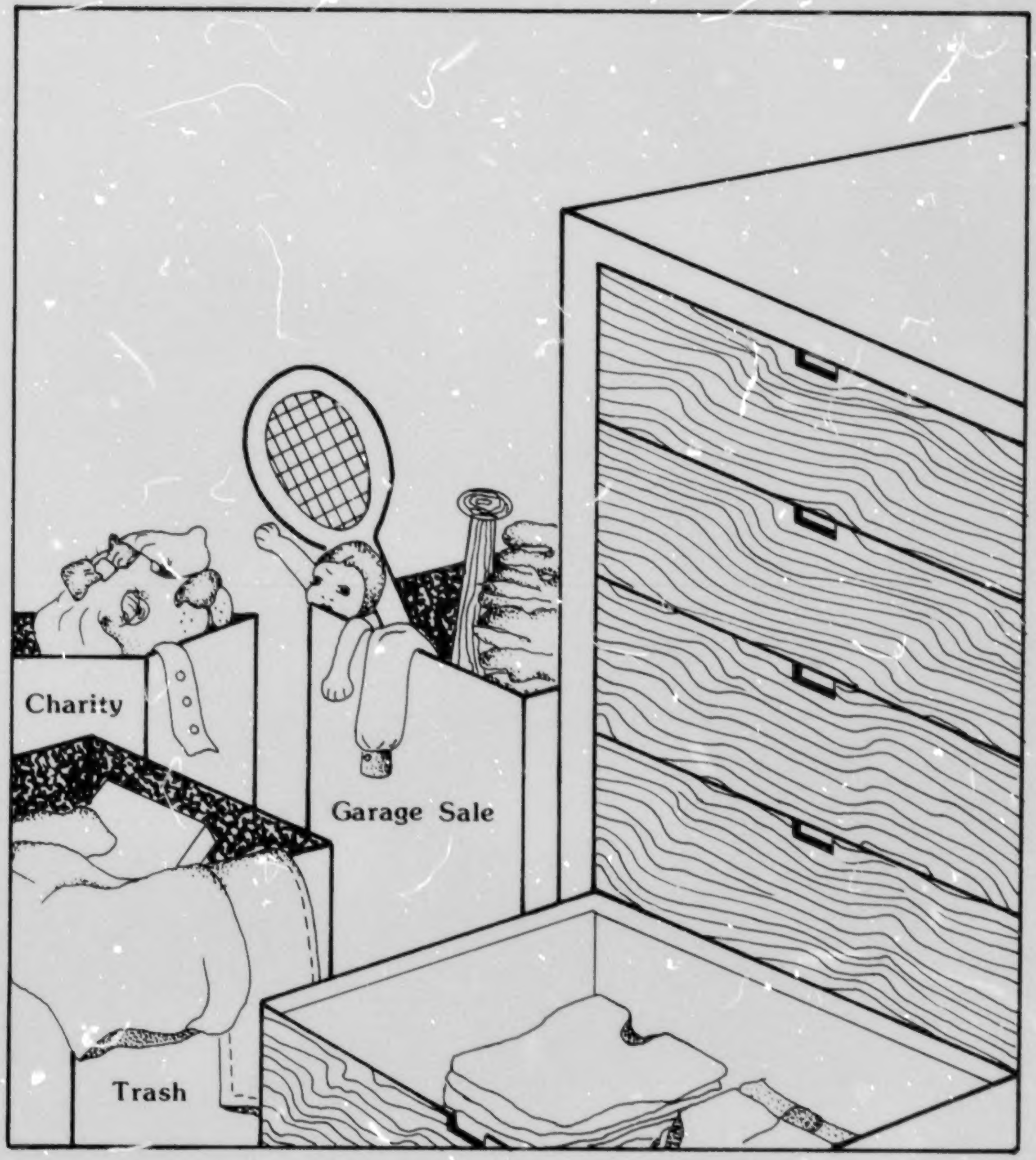
PLANNING AND ORGANIZING PERSONAL SPACE (CONT.)



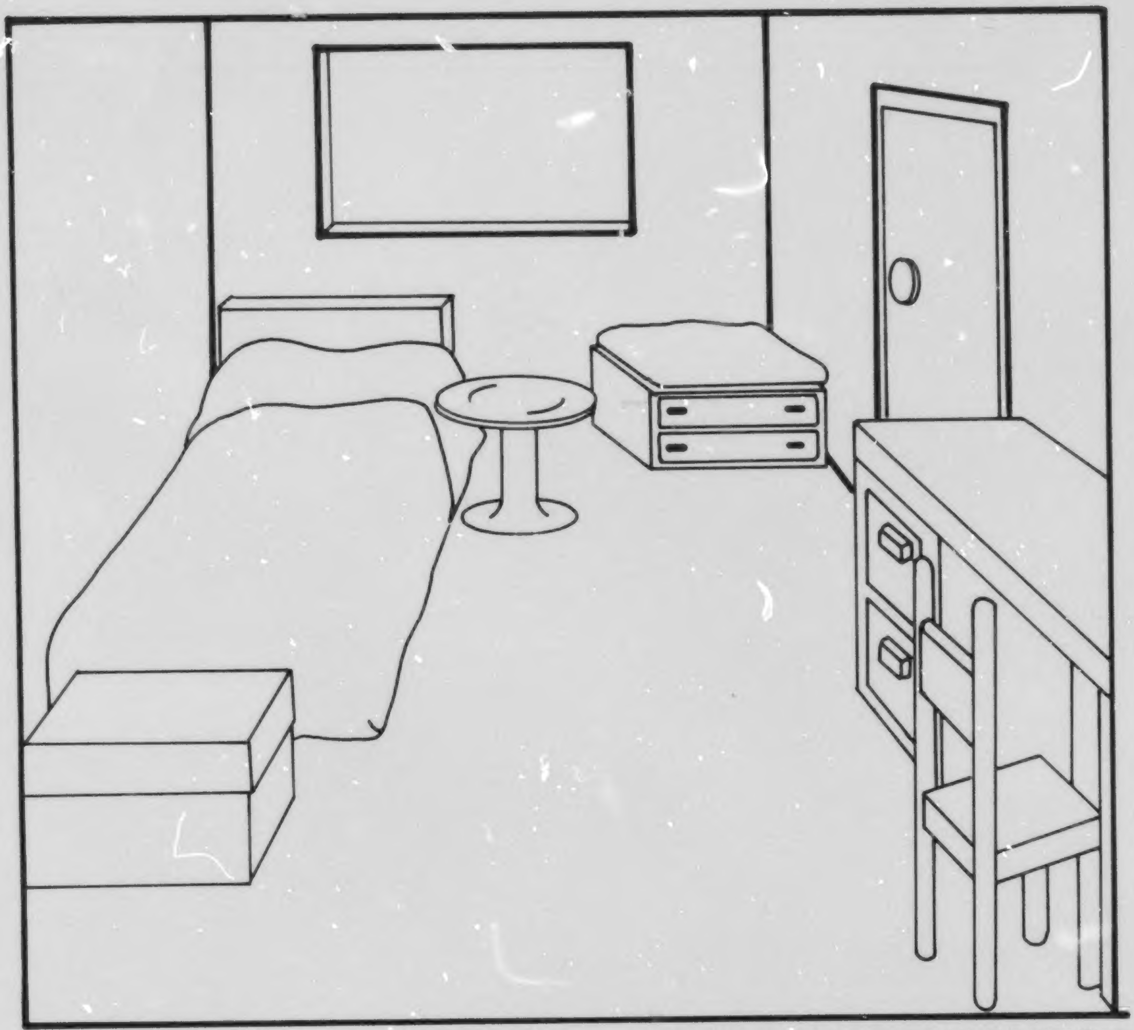
Never Let Clutter Accumulate — Put Things Away After Using

PLANNING AND ORGANIZING PERSONAL SPACE (CONT.)

Throw Away, Sell, or Donate All Items No Longer Useful


Charity
Garage Sale
Trash

YOU AND YOUR ROOM DECOR



PRETEND THIS IS YOUR BEDROOM. IT LOOKS BARE BECAUSE IT DOES NOT REFLECT YOUR PERSONALITY. USE CRAYONS OR MARKERS TO DECORATE THIS ROOM TO REFLECT *YOU*. YOU MIGHT ADD THE FOLLOWING THINGS TO THIS ROOM TO SHOW YOUR TASTES, PREFERENCES, ACTIVITIES, AND INTERESTS.

COLOR - red, blue, yellow, green, pink, purple . . .
WINDOW COVERINGS - draperies, shades, blinds . . .
FLOOR COVERINGS - carpet, rugs, linoleum, tile . . .
PERSONAL ITEMS - typewriter, television set, sewing machine, lamp, books, pillows, baskets, plants, a collection or hobby . . .
WALL DECORATIONS - pictures, posters, bulletin board . . .
FURNITURE - shelves, chair, mirror, table . . .

REMEMBER -- THIS IS YOUR ROOM. MAKE IT LOOK THE WAY YOU WOULD BEST LIKE IT.

TEXTURE SCRAMBLE PUZZLE

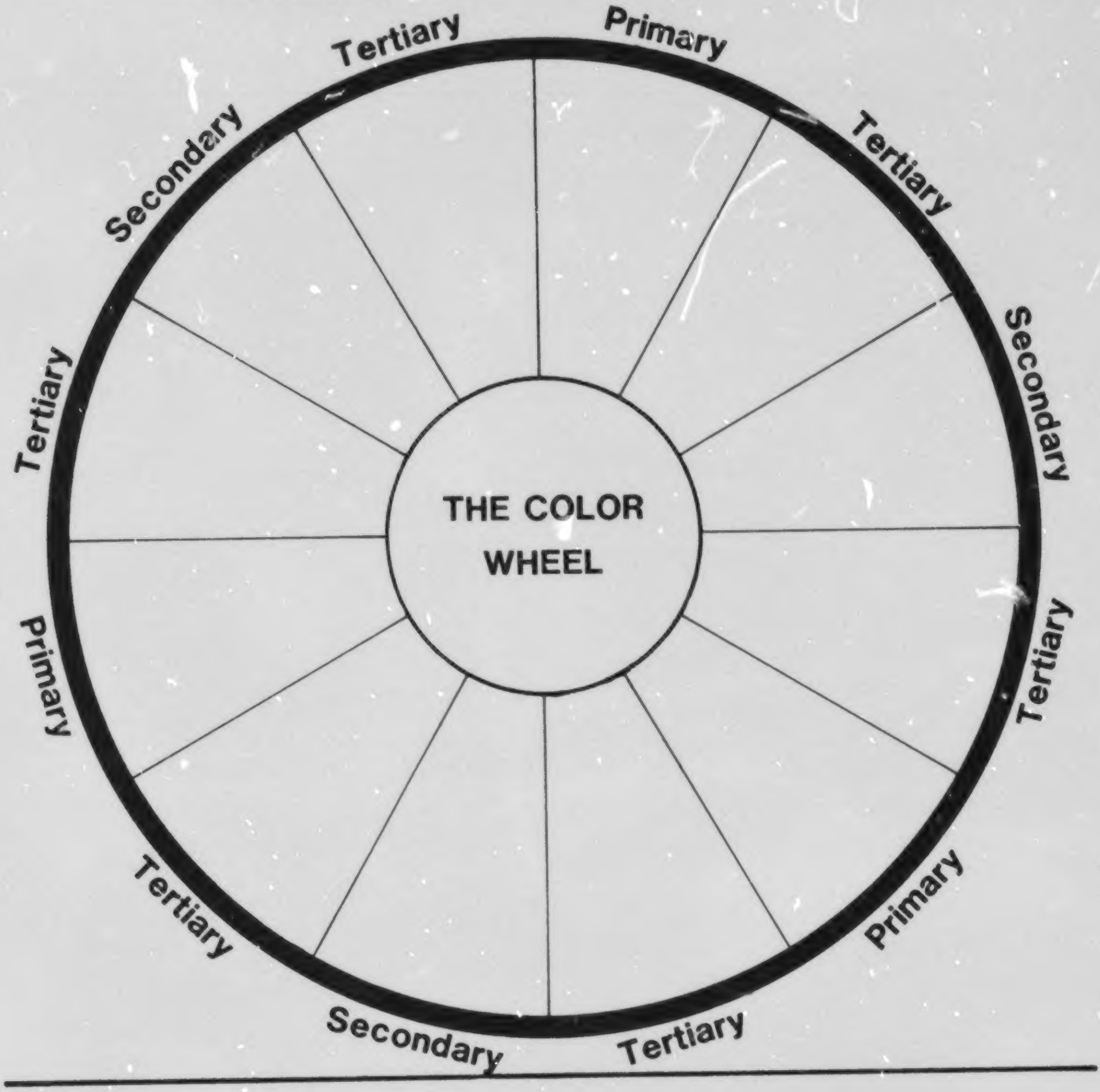
DIRECTIONS: Unscramble the following words which are often used to describe textures. Unscramble the circled letters to complete the sentence below.

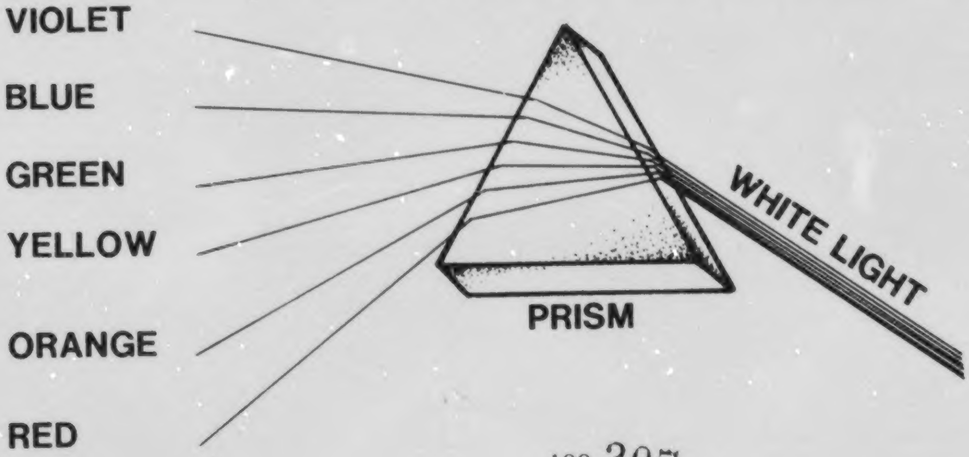
1. FOTS ___ ___ ___ ○
2. ZZUFY ___ ○ ___ ___ ___
3. RADH ○ ___ ___ ___
4. HOTSOM ___ ___ ___ ○ ○ ___
5. HOGUR ___ ___ ___ ○ ___
6. HINSY ___ ○ ○ ___ ___
7. SIRCP ○ ___ ___ ___ ___
8. KYSIL ○ ___ ___ ___ ___

Textures can be described by using the senses of ___ ___ ___ ___ ___ and ___ ___ ___ ___ ___.

COLOR MY WORLD

DIRECTIONS: Identify the three primary colors and then proceed to finish the color wheel by blending appropriate colors.

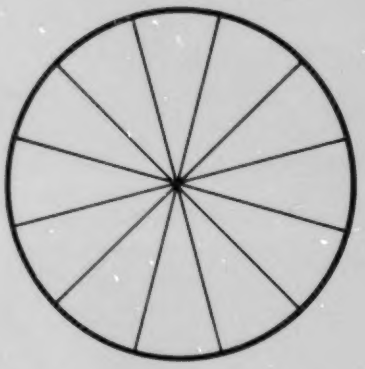

Primary
Tertiary
Secondary
Tertiary
Primary
Tertiary
Secondary
Tertiary
Primary
Tertiary
Secondary
Tertiary
THE COLOR WHEEL


VIOLET
BLUE
GREEN
YELLOW
ORANGE
RED
PRISM
WHITE LIGHT

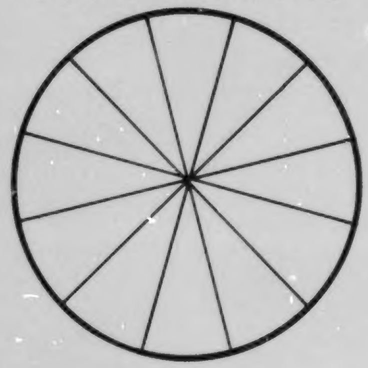
THE DIFFERENT COLOR SCHEMES

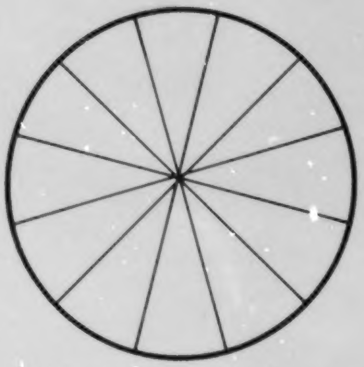
DIRECTIONS: Color the appropriate color scheme in each color wheel. In the blanks provided, give a short definition of each color scheme.

ANALOGOUS

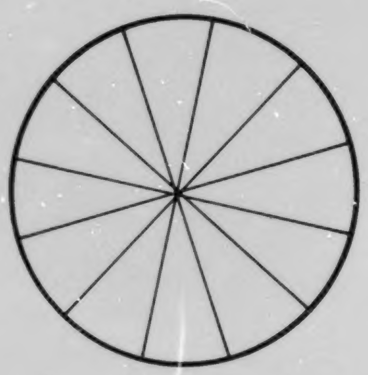


MONOCHROMATIC

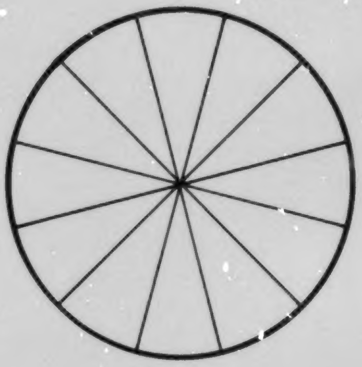




COMPLEMENTARY



SPLIT COMPLEMENTARY



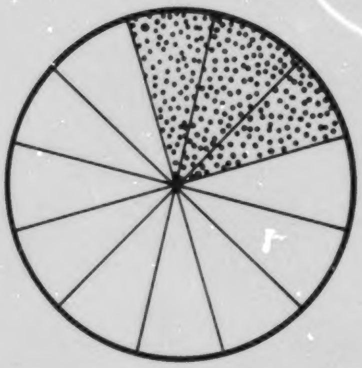
TRIAD

1. ANALOGOUS ____________________
2. MONOCHROMATIC ____________________
3. COMPLEMENTARY ____________________
4. SPLIT COMPLEMENTARY ____________________
5. TRIAD ____________________

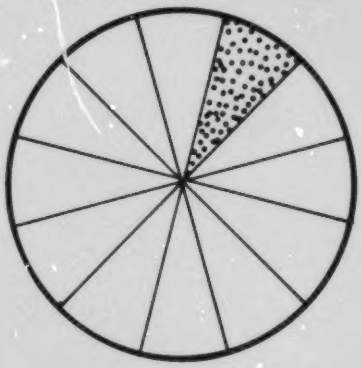
THE DIFFERENT COLOR SCHEMES
Answer Key

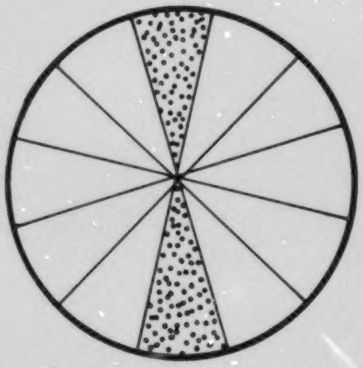
DIRECTIONS: Color the appropriate color scheme in each color wheel. In the blanks provided, give a short definition of each color scheme.

ANALOGOUS

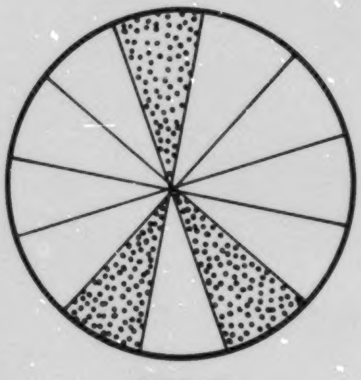


MONOCHROMATIC

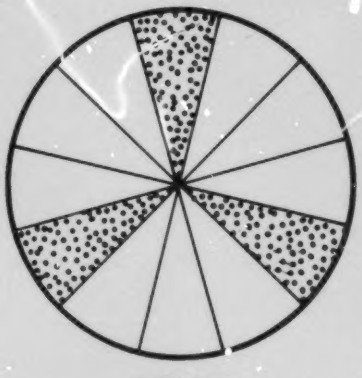




COMPLEMENTARY



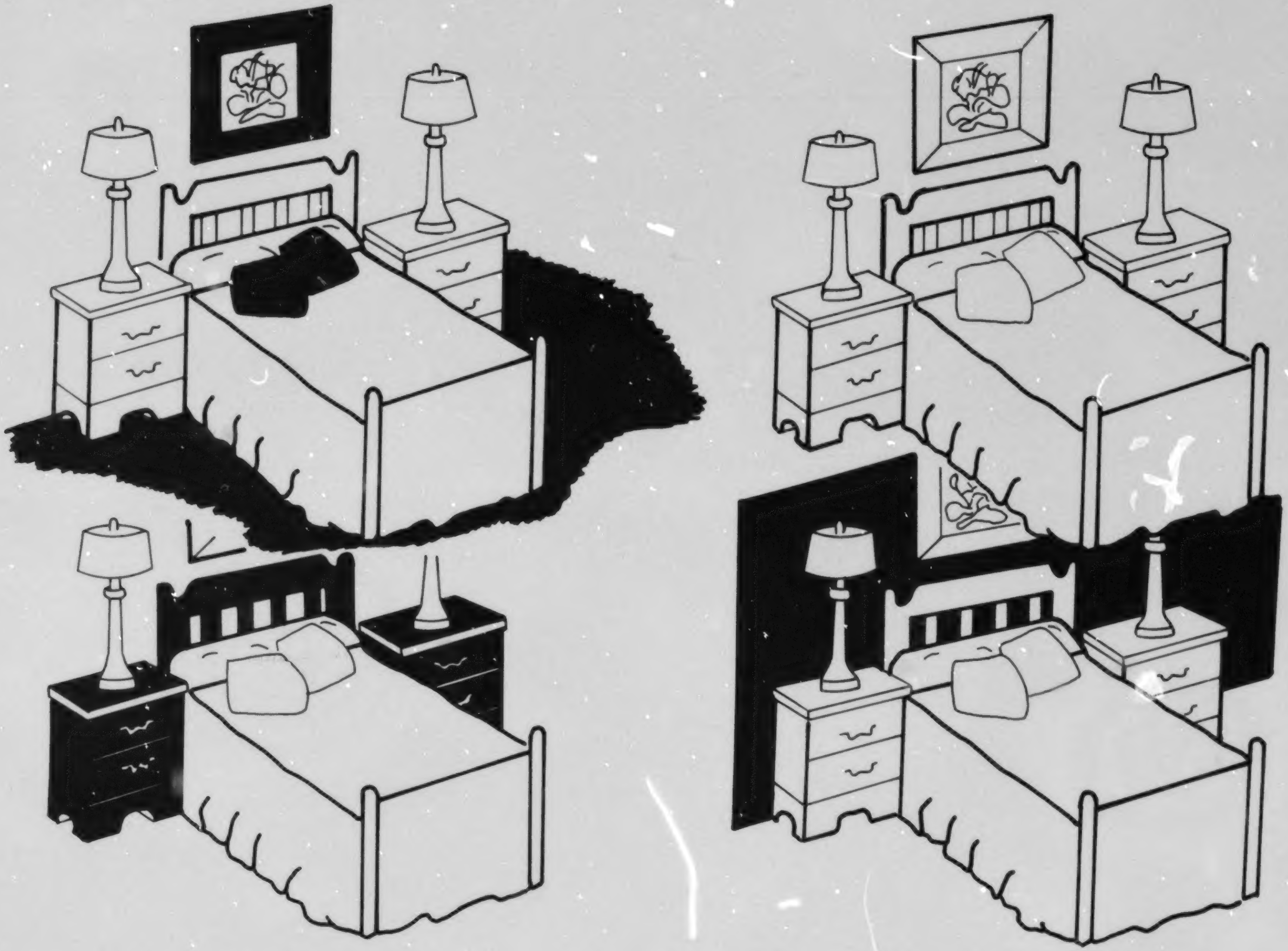
SPLIT COMPLEMENTARY



TRIAD

1. ANALOGOUS Uses three colors that are next to each other on the color wheel
2. MONOCHROMATIC Uses tints and shades of one color on the wheel
3. COMPLEMENTARY Uses two colors opposite each other on the wheel
4. SPLIT COMPLEMENTARY Uses a color with the two colors on either side of its complement
5. TRIAD Uses three colors which form a triangle on the color wheel

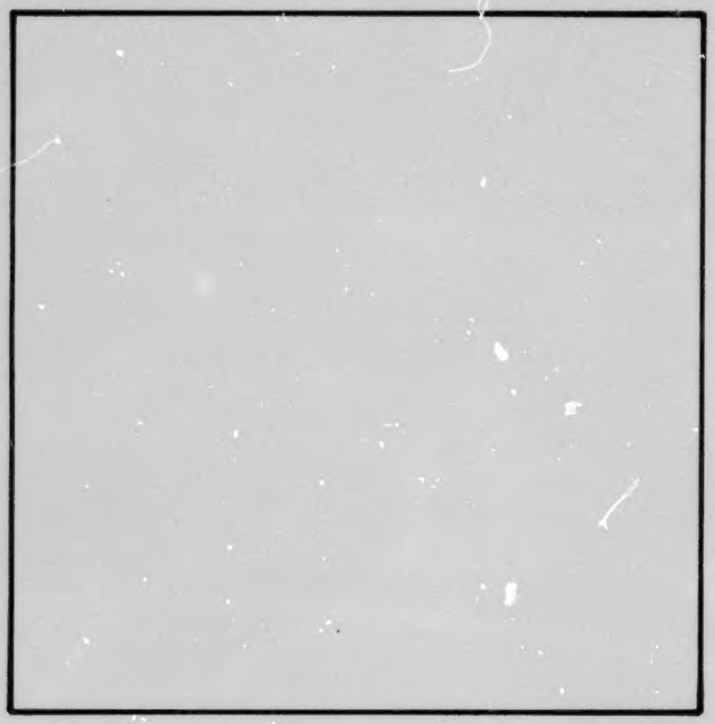
COLOR INFLUENCES DESIGN



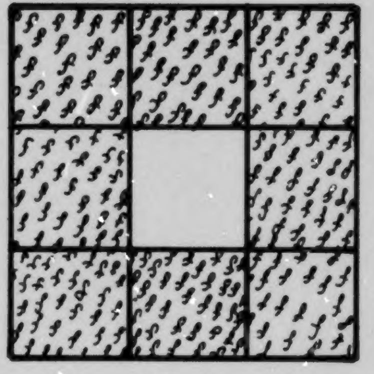
NINE PATCH QUILT BLOCK

Directions: Transfer pattern piece to cardboard, plastic, or sandpaper to make template. (Sandpaper prevents slipping.) Cut out. Trace around template on wrong side of fabric with a well-sharpened lead pencil. Hold pencil at an angle so that pencil point is against the template. Add ¼" seam allowance. Use a ruler to draw this second line. The second line is the cutting line; the first line is a stitching guide. Mark and cut out nine squares. Lay out the pieces in the desired block arrangement. *Basic Nine Patch, Block In A Box,* and *Straight Furrow* are illustrated. Stitch squares together in rows of three. Stitch the rows together to form a block.

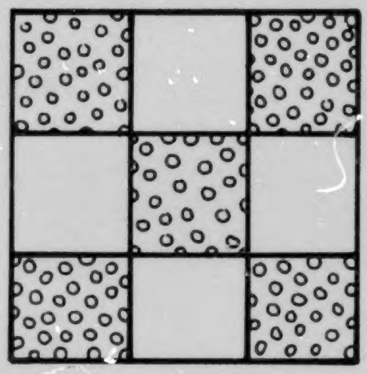
Pattern



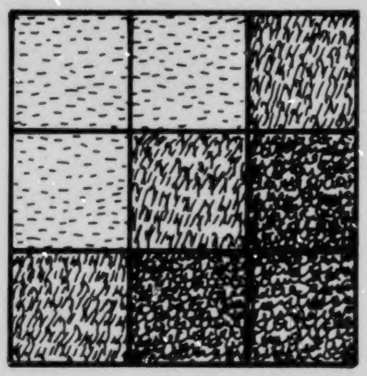
Basic Nine Patch



Block in a Box

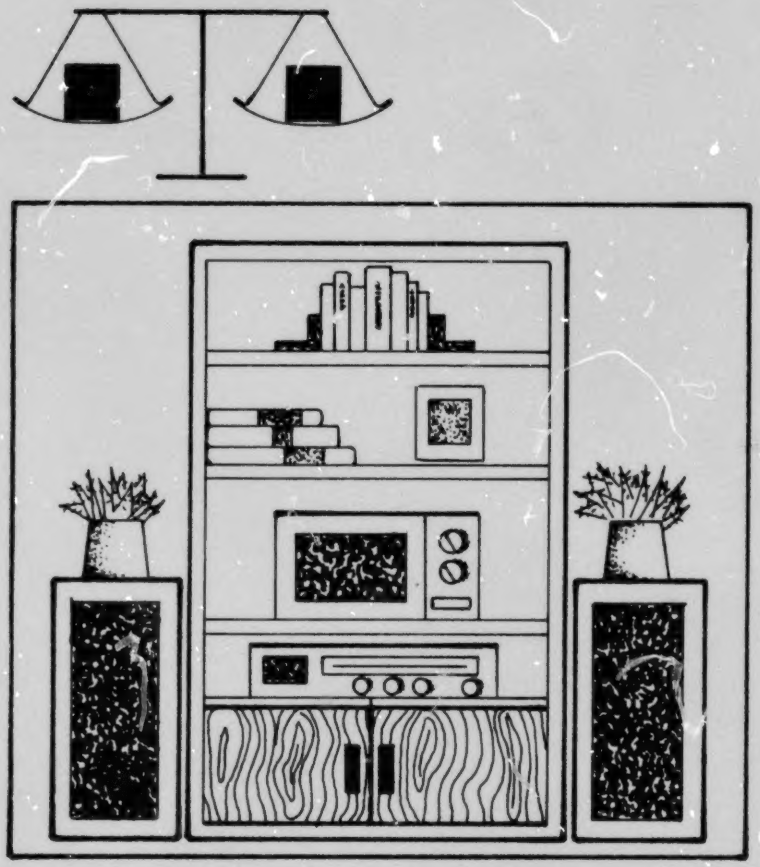


Straight Furrow

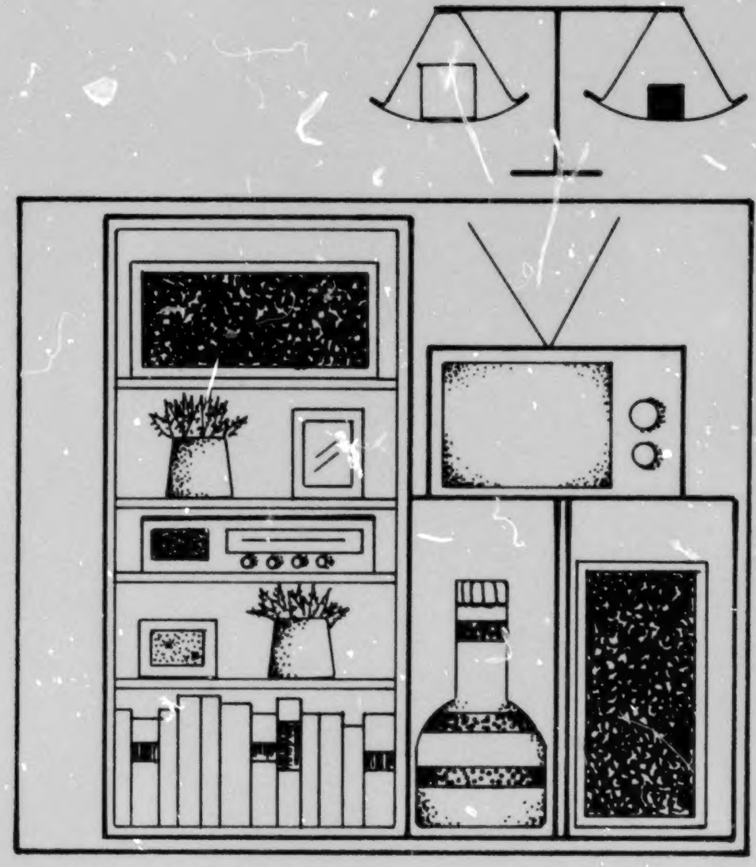


THE PRINCIPLES OF DESIGN BALANCE:

Sense of Weight Equilibrium



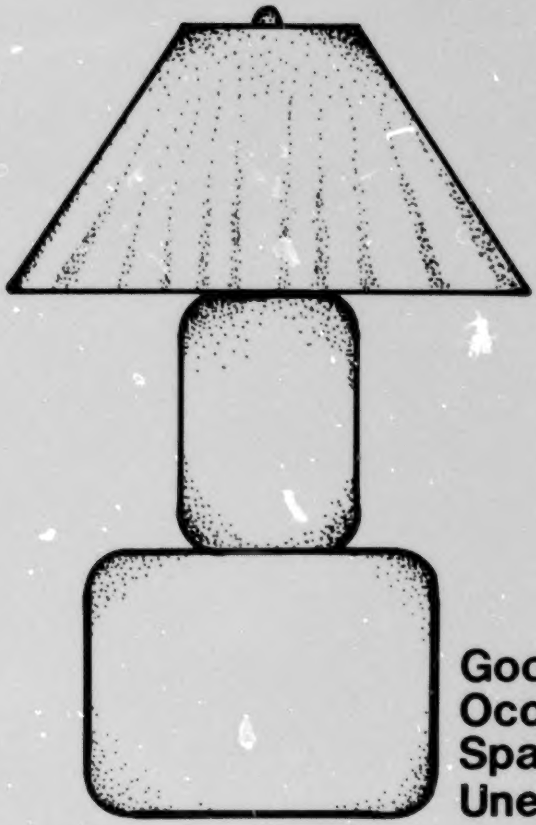
Formal Balance - Bisymmetrical



Informal Balance - Asymmetrical

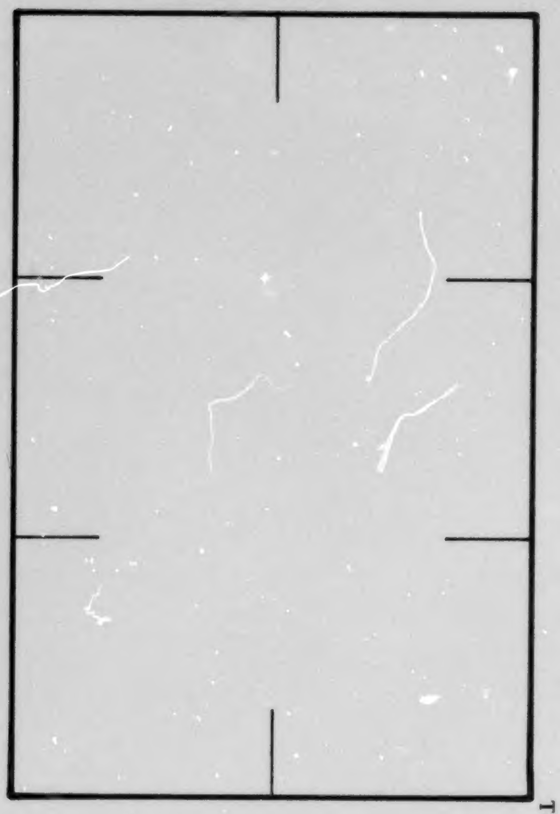
THE PRINCIPLES OF DESIGN PROPORTION:

The Relationship of Parts



Good Proportion Occurs When Spaces are Divided Unequally.

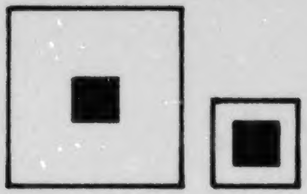
The Greek Standard
a 2:3 Rectangle:
3:5, 5:8, 8:13, . . .

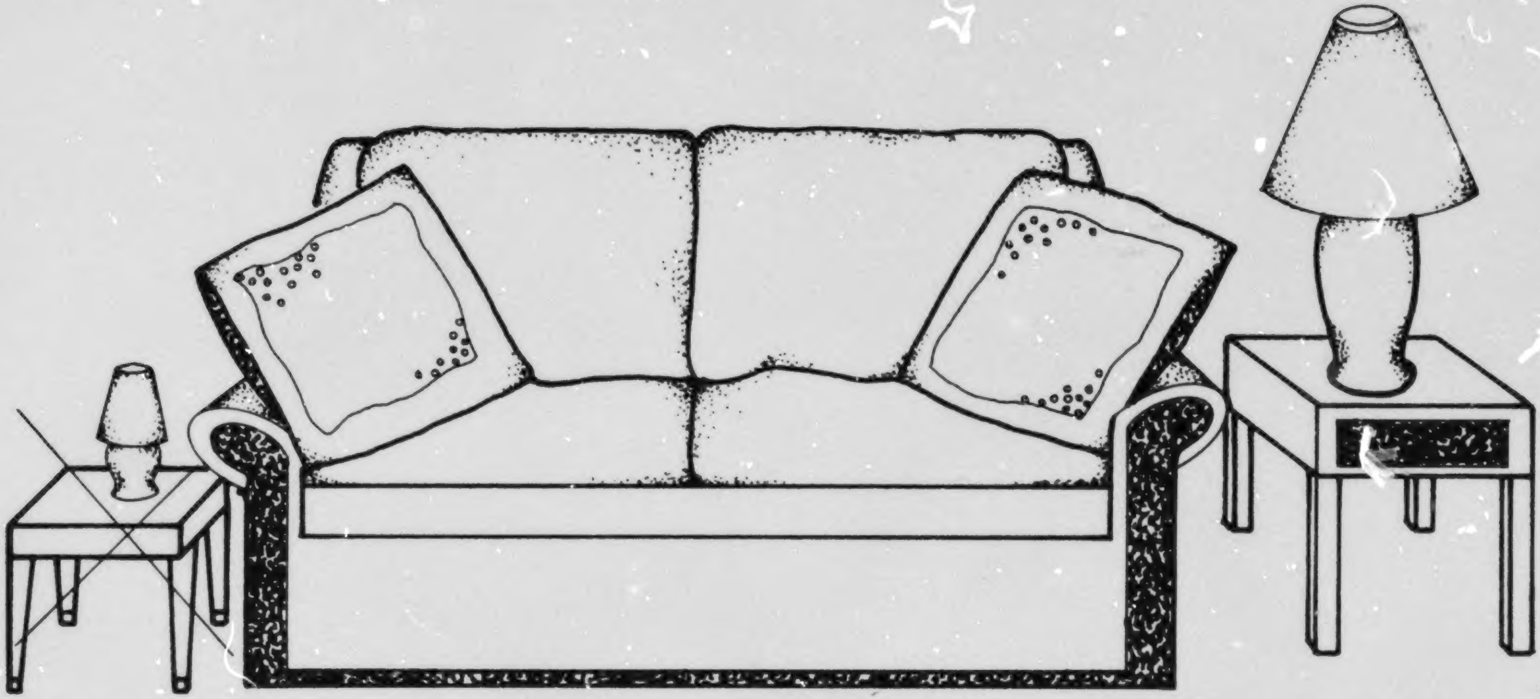


T-19

THE PRINCIPLES OF DESIGN
SCALE:

The Relationship of Sizes



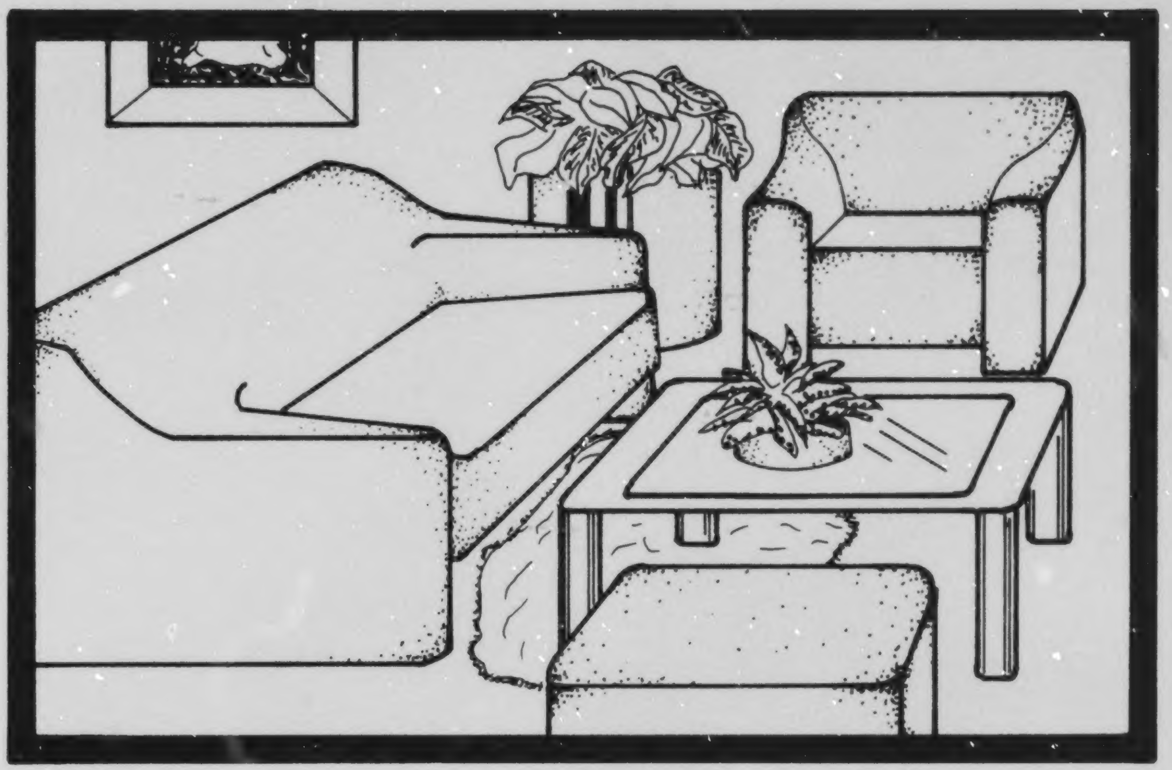


T-20

THE PRINCIPLES OF DESIGN HARMONY:

Unity Through

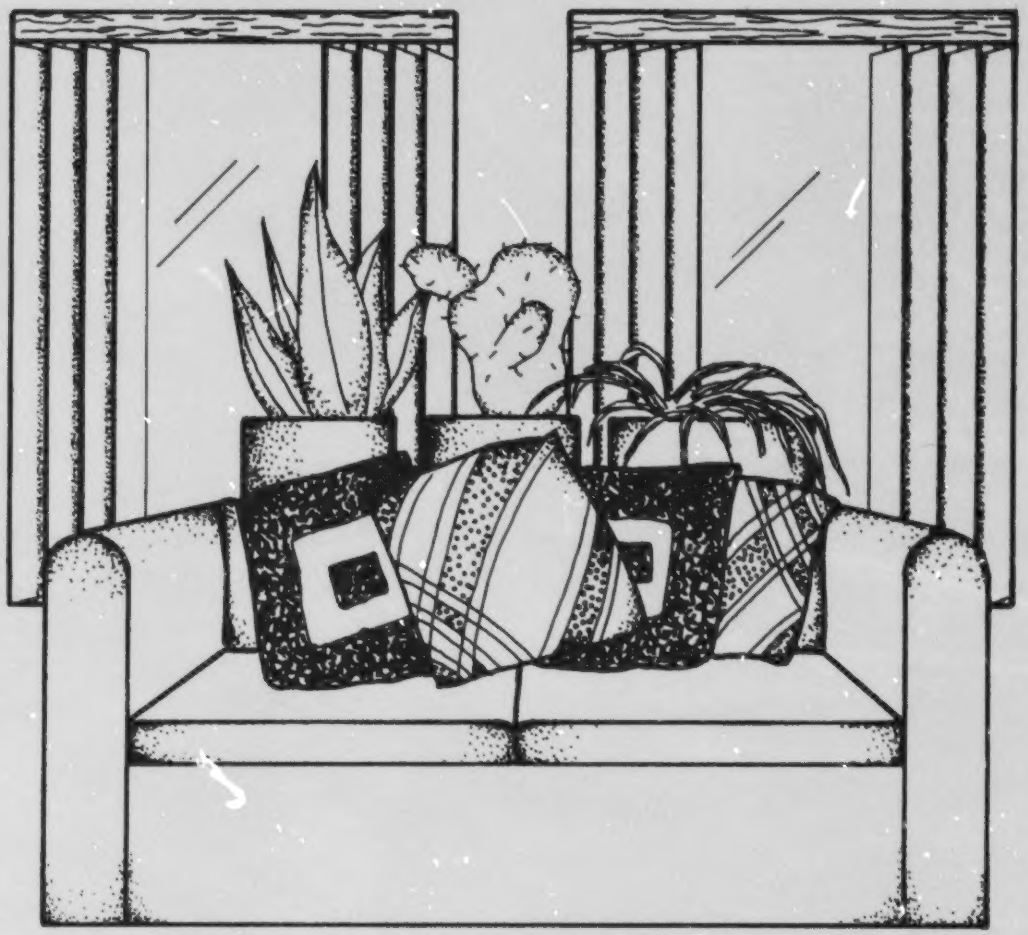
- Line
- Shape
- Texture
- Style
- Color



THE PRINCIPLES OF DESIGN
RHYTHM:

Pattern of Repetition Achieved Through

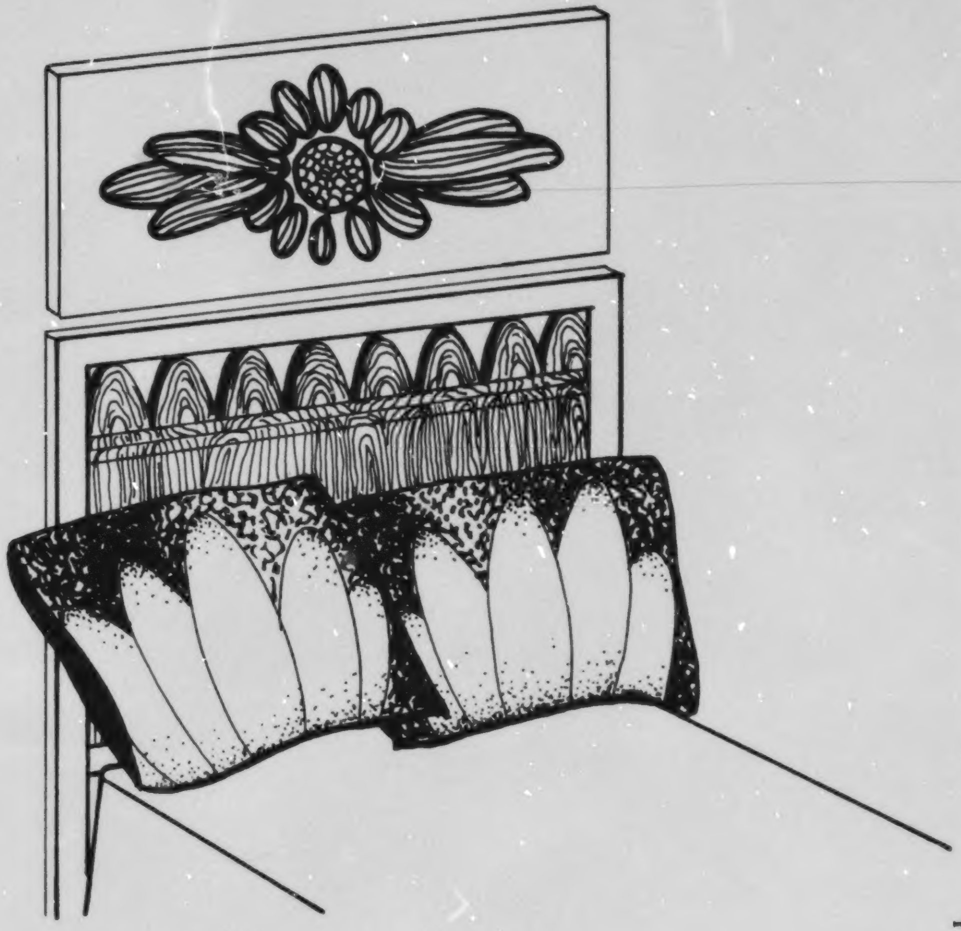
- Form
- Color
- Texture
- Line



THE PRINCIPLES OF DESIGN EMPHASIS:

The Focal Point or the Center of Interest Achieved Through

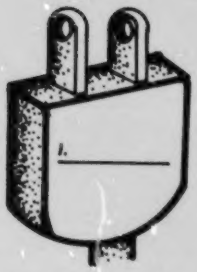
- Color Contrast
- Arrangement
- Repetition

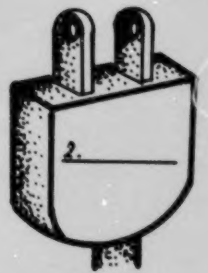


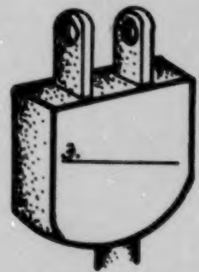
T-24

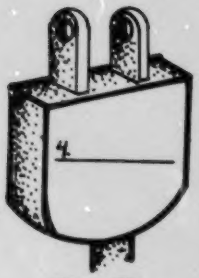
THINKING ABOUT YOUR ENERGY USE

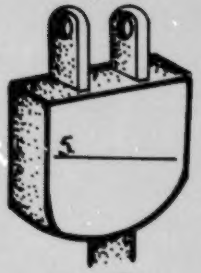
DIRECTIONS: In the spaces provided below, list 12 electrical appliances that are used at home.

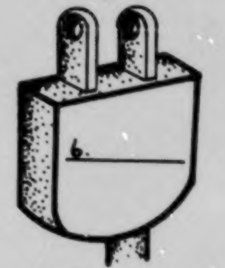


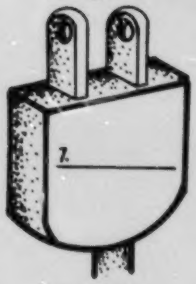


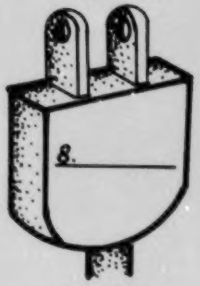


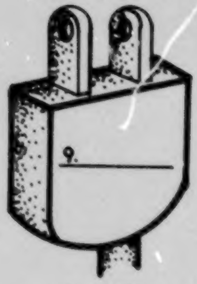


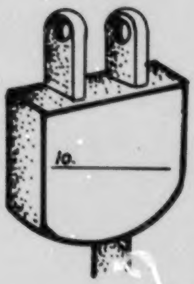


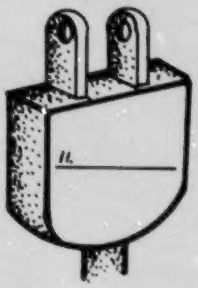


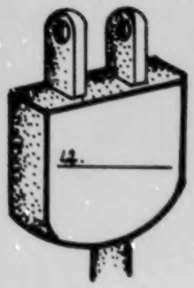






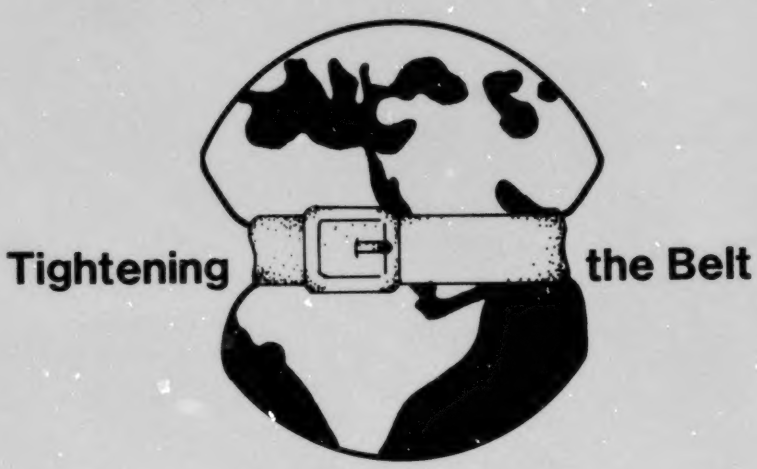






T-25

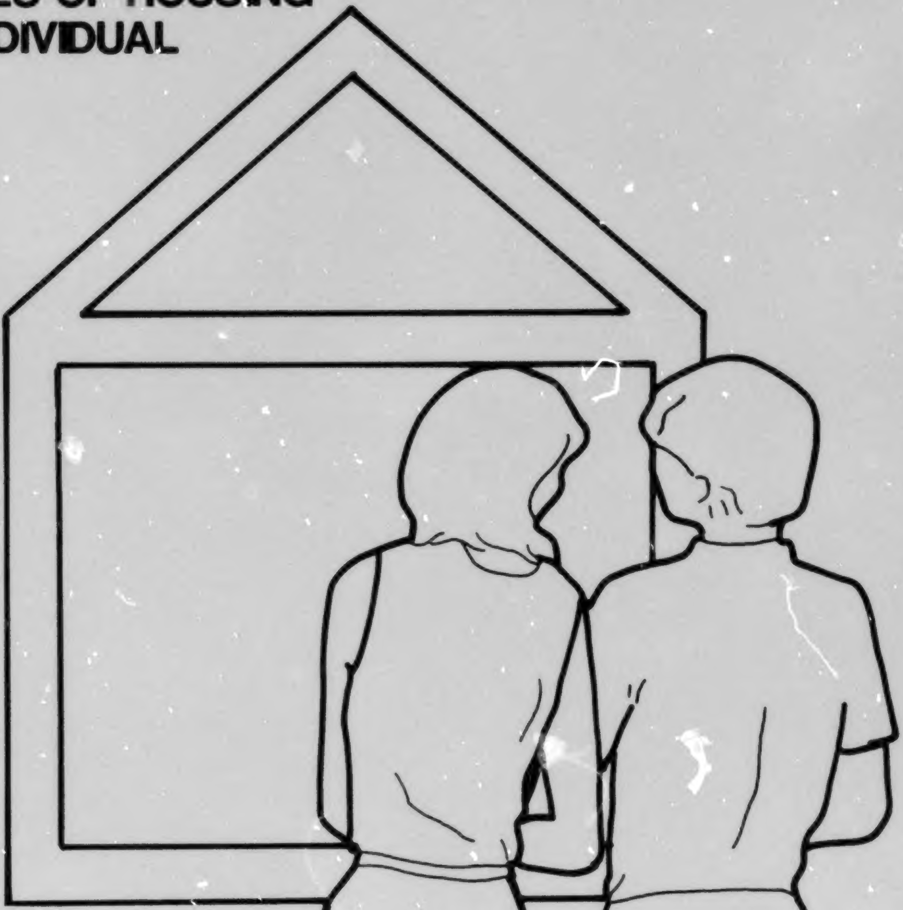
CONSERVATION CHECK LIST



DIRECTIONS: Place a check in the appropriate column beside each item according to your conservation habits.

DO YOU ...	ALMOST ALWAYS	OCCASIONALLY	ALMOST NEVER
Turn off TV when not watching?			
Open refrigerator door only when necessary?			
Turn off water while brushing teeth?			
Close door quickly when leaving house?			
Turn faucet off completely when washing hands?			
Turn off lights when leaving room?			
Remind friends and family to conserve resources?			

INFLUENCES OF HOUSING ON THE INDIVIDUAL



Physical

Psychological

Social

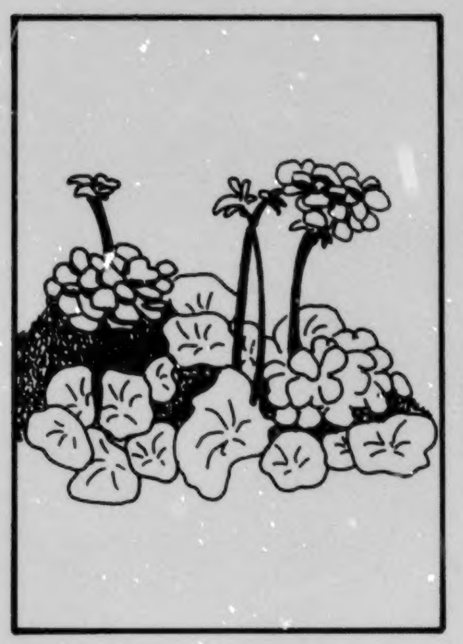
Emotional

Intellectual

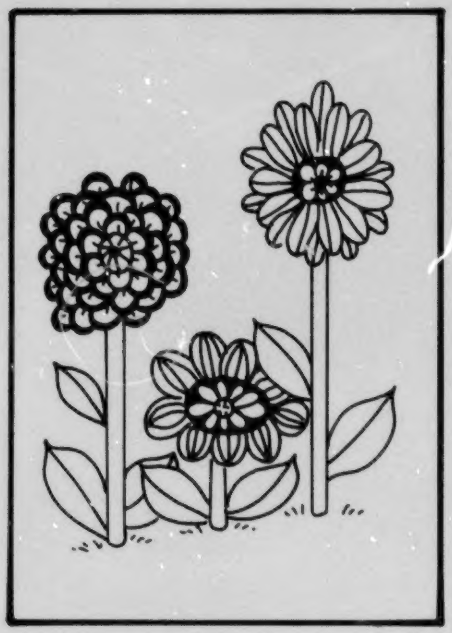
Economic

STYLES OF DESIGN

Naturalistic or Realistic Design

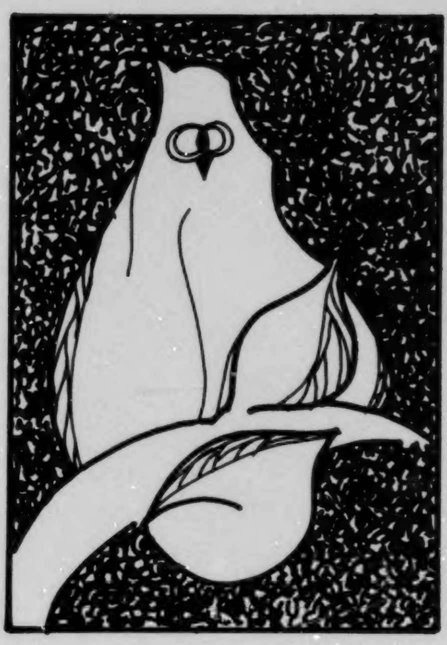


Conventional or Stylistic Design

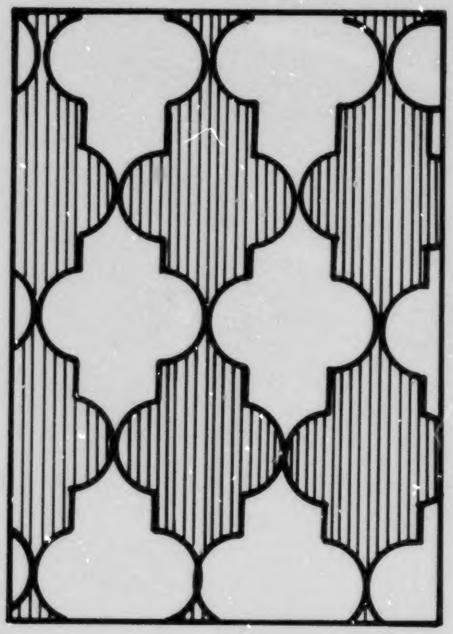


STYLES OF DESIGN (CONT.)

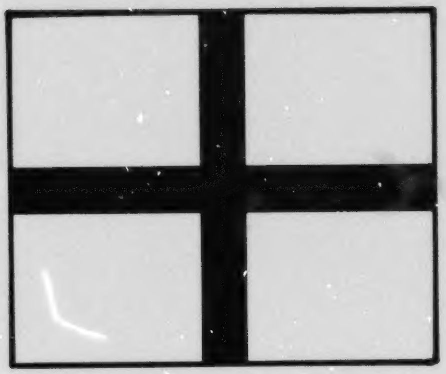
Abstract Design

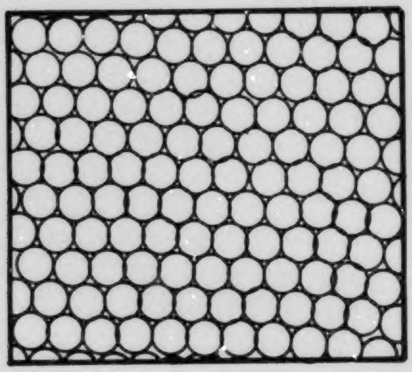


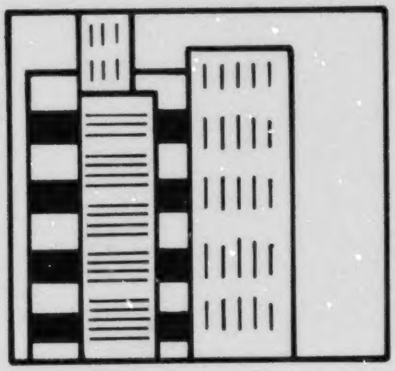
Geometric Design



ELEMENTS AND PRINCIPLES OF DESIGN



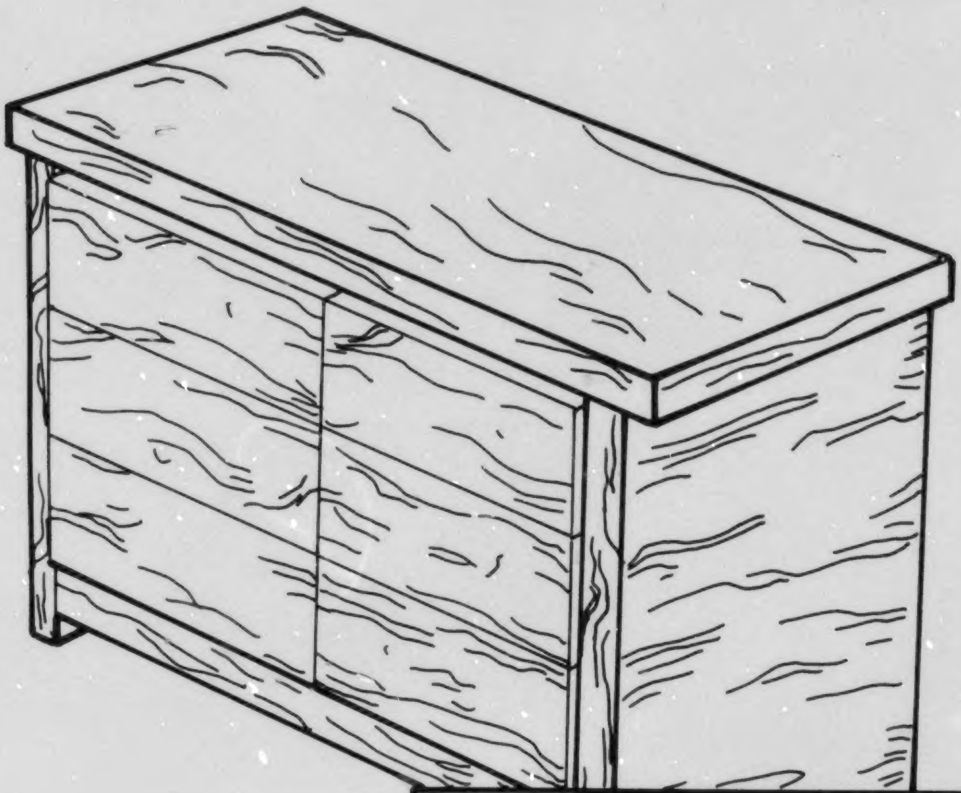


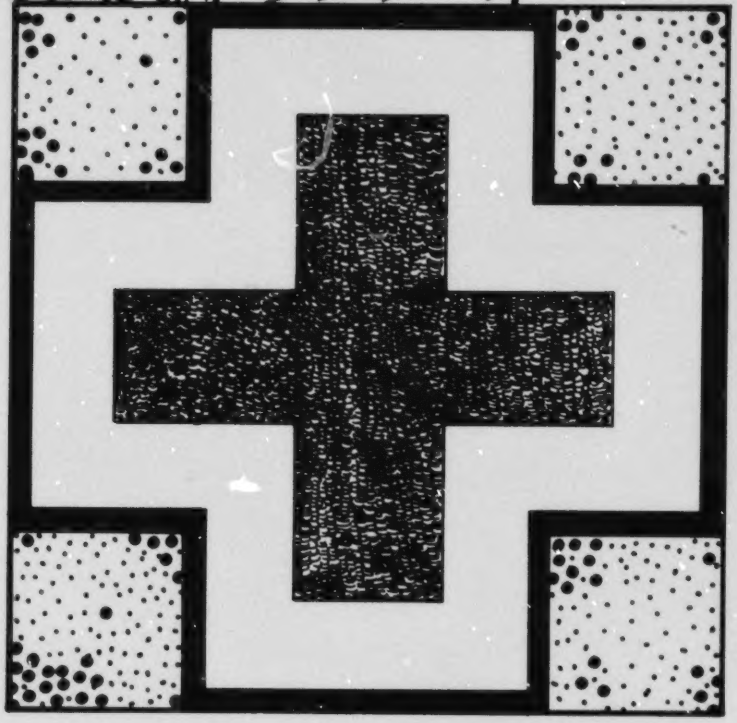


______________________________ IS ALL OF THE AREA THAT WE CAN SEE. IT MAY BE FILLED IN, DIVIDE AN AREA, OR CHANGE THE APPARENT SIZE AND QUANTITY OF AN AREA. IT MAY GIVE A FEELING OF PRIVACY, PROTECTION, AWE, REVERENCE, LONELINESS, CROWDEDNESS, OR CLUTTER.

ELEMENTS AND PRINCIPLES OF DESIGN (CONT.)

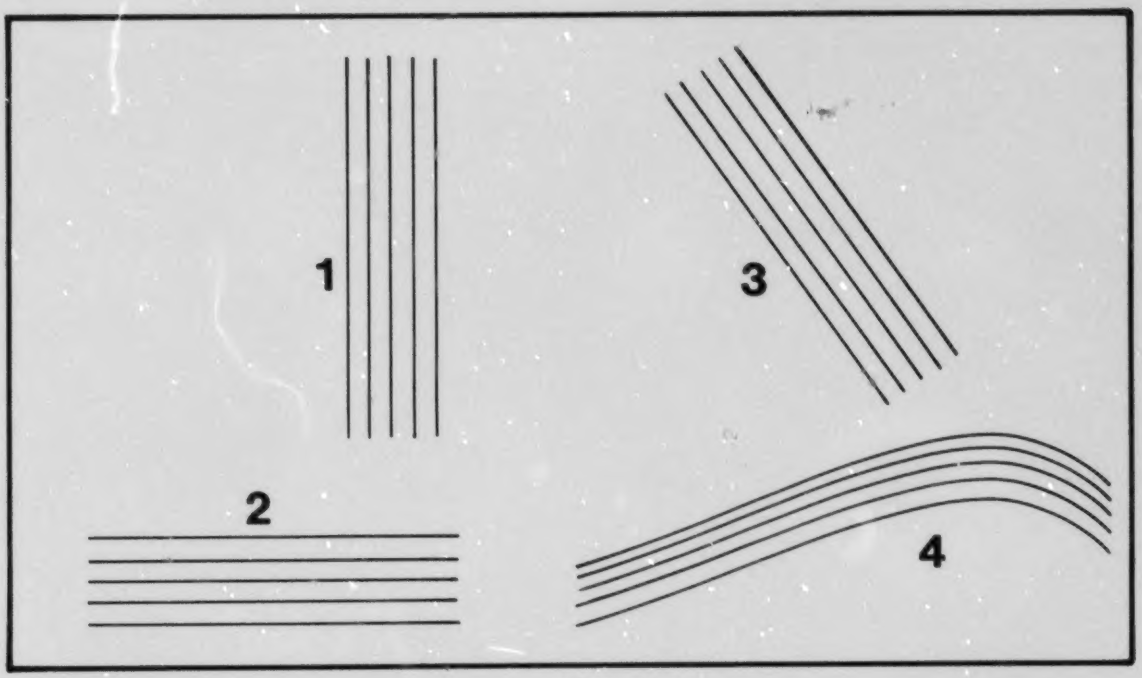
T-30





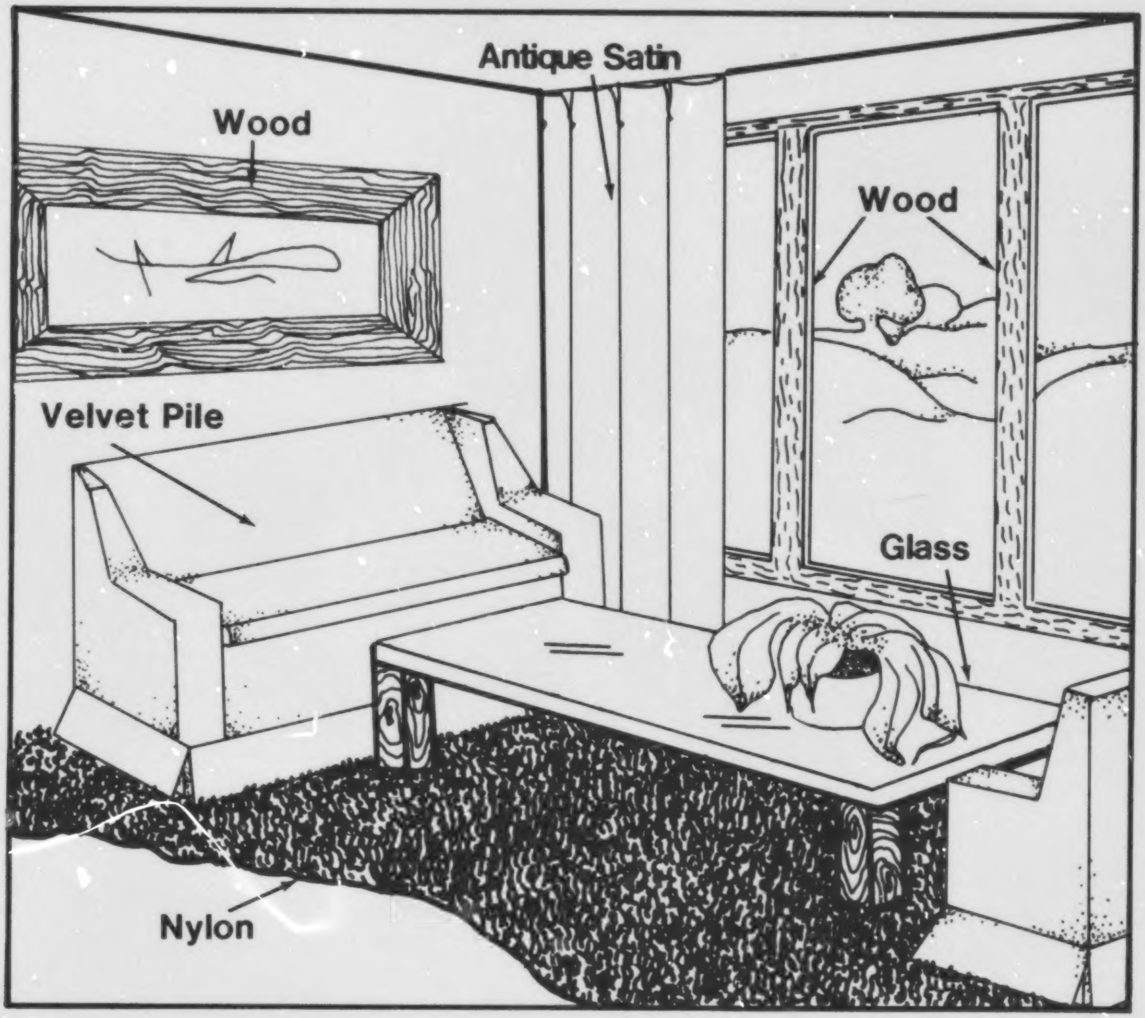
_____________________ RESULTS WHEN LINES ARE COMBINED TO CREATE AND DEFINE A SOLID SHAPE WHICH MAY BE TWO-DIMENSIONAL OR THREE-DIMENSIONAL.

ELEMENTS AND PRINCIPLES OF DESIGN (CONT.)



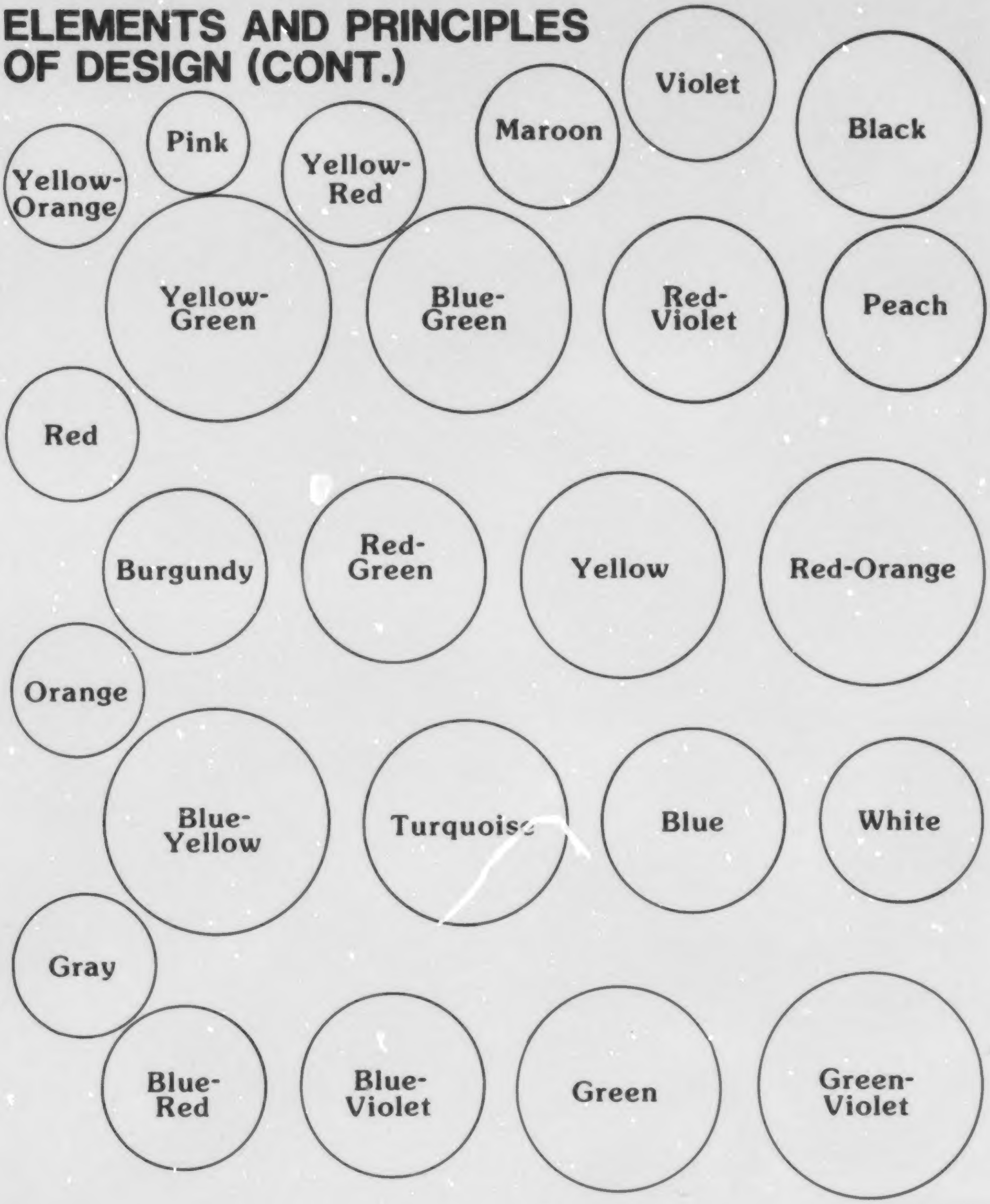
__________________ INDICATES DIRECTION. THERE ARE FOUR TYPES: (1) ____________ __________________ GIVE AN IMPRESSION OF DIGNITY, DISCIPLINE, AND STRENGTH; (2) ____________________________ GIVE A DOWN-TO-EARTH FEELING AND SUGGEST SERENITY, REPOSE, AND RELAXATION; (3) ____________________________ BREAK THE MONOTONY AND EXPRESS EXCITEMENT AND MOVEMENT; AND (4) __________________ __________________ SUGGEST GRACE, YOUTH, GAIETY, AND SUBTLE MOTION.

ELEMENTS AND PRINCIPLES OF DESIGN (CONT.)


Antique Satin
Wood
Wood
Velvet Pile
Glass
Nylon

______________________ IS THE SURFACE STRUCTURE OF A MATERIAL.

ELEMENTS AND PRINCIPLES OF DESIGN (CONT.)


Violet
Black
Maroon
Pink
Yellow-Red
Yellow-Orange
Yellow-Green
Blue-Green
Red-Violet
Peach
Red
Burgundy
Red-Green
Yellow
Red-Orange
Orange
Blue-Yellow
Turquoise
Blue
White
Gray
Blue-Red
Blue-Violet
Green
Green-Violet

(1) PRIMARY COLORS ARE ____________________

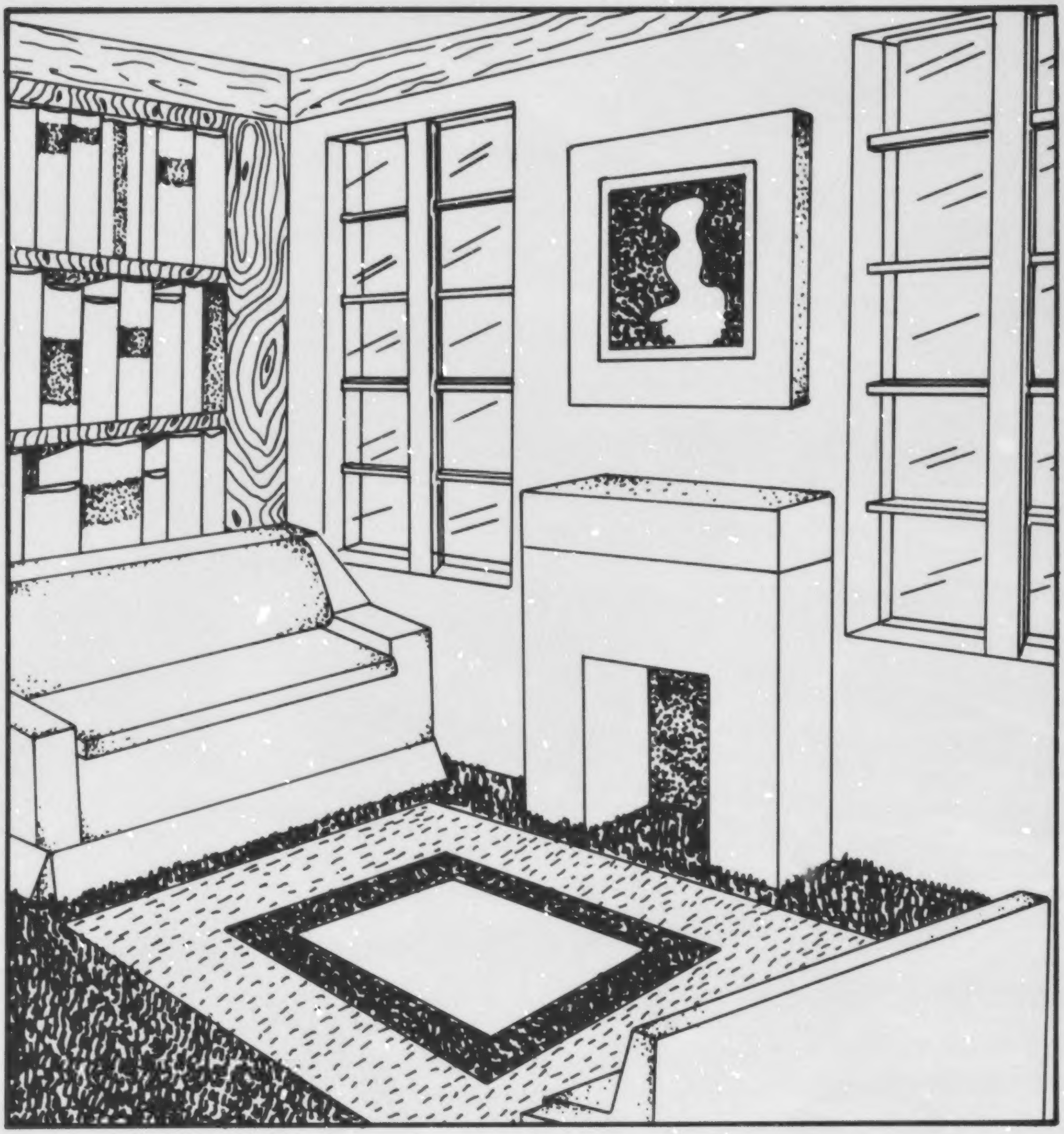
(2) SECONDARY COLORS ARE ____________________

(3) TERTIARY COLORS ARE ____________________

(4) TINTS ARE ACHIEVED BY ADDING __________ TO THE COLOR.

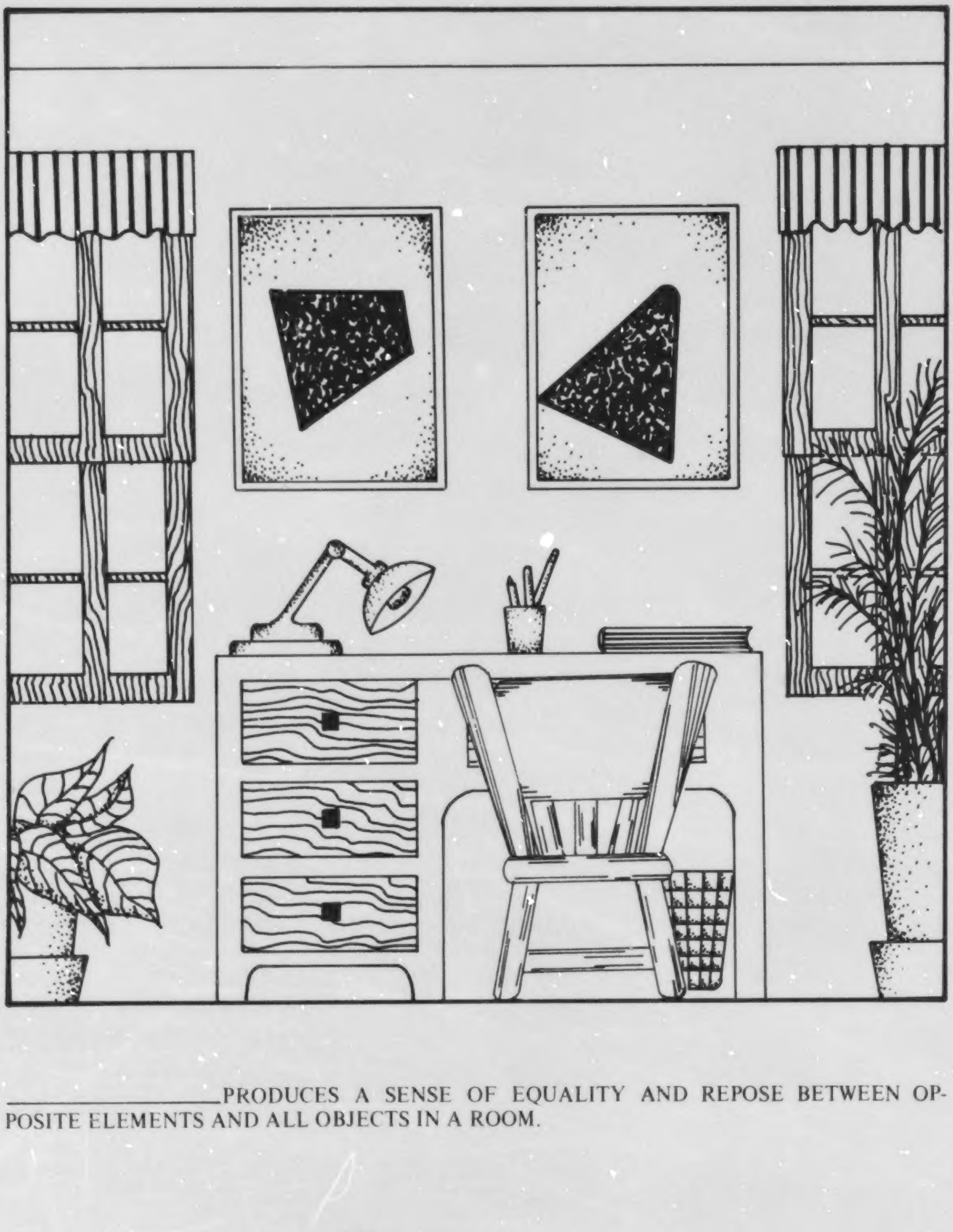
(5) SHADES ARE ACHIEVED BY ADDING __________ TO THE COLOR.

ELEMENTS AND PRINCIPLES OF DESIGN (CONT.)



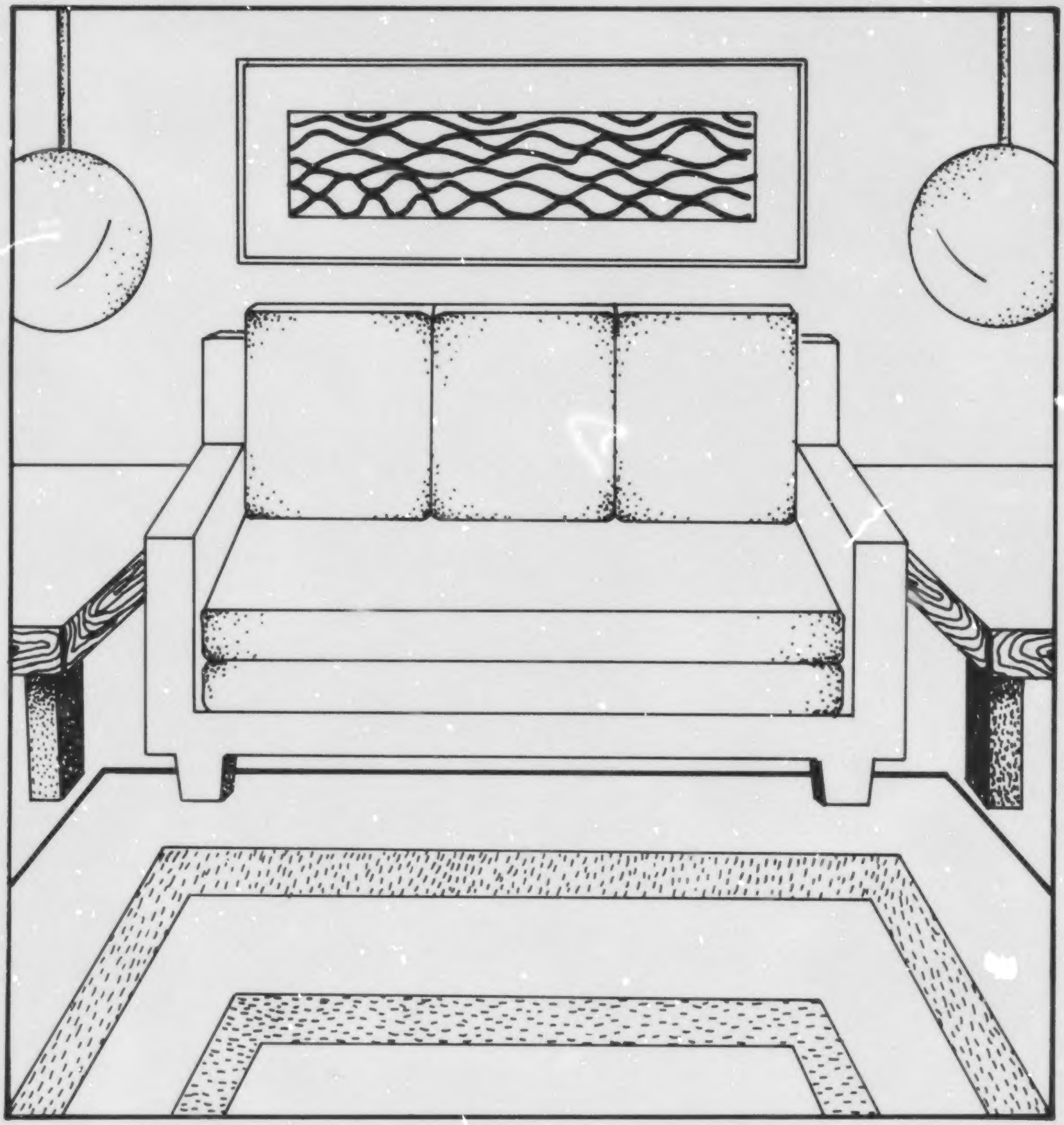
__________________ REQUIRES THAT ALL SPACE DIVISIONS BE PLEASINGLY RELATED TO ONE ANOTHER AND TO THE DESIGN AS A WHOLE.

ELEMENTS AND PRINCIPLES OF DESIGN (CONT.)



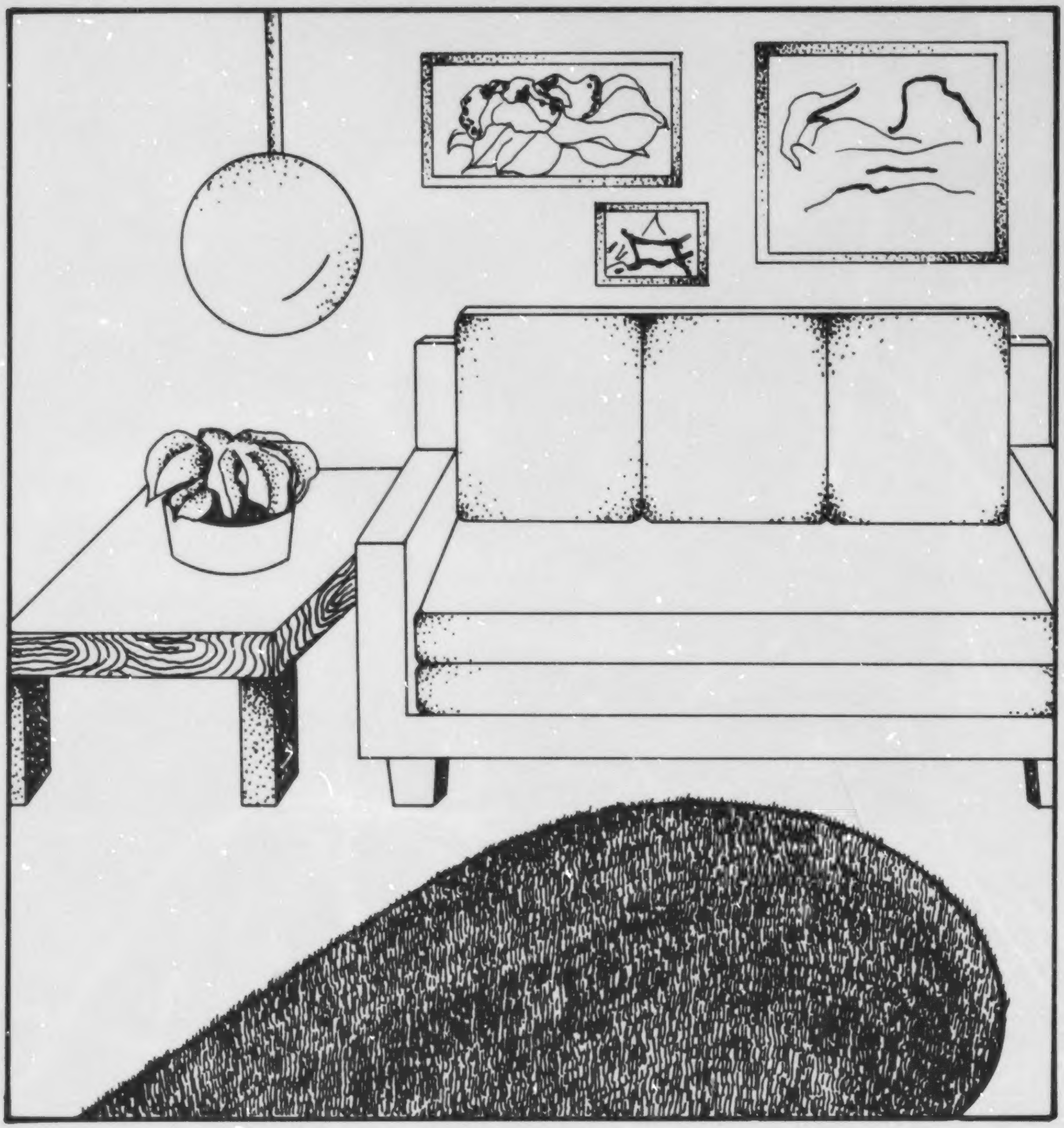
__________________PRODUCES A SENSE OF EQUALITY AND REPOSE BETWEEN OPPOSITE ELEMENTS AND ALL OBJECTS IN A ROOM.

ELEMENTS AND PRINCIPLES OF DESIGN (CONT.)



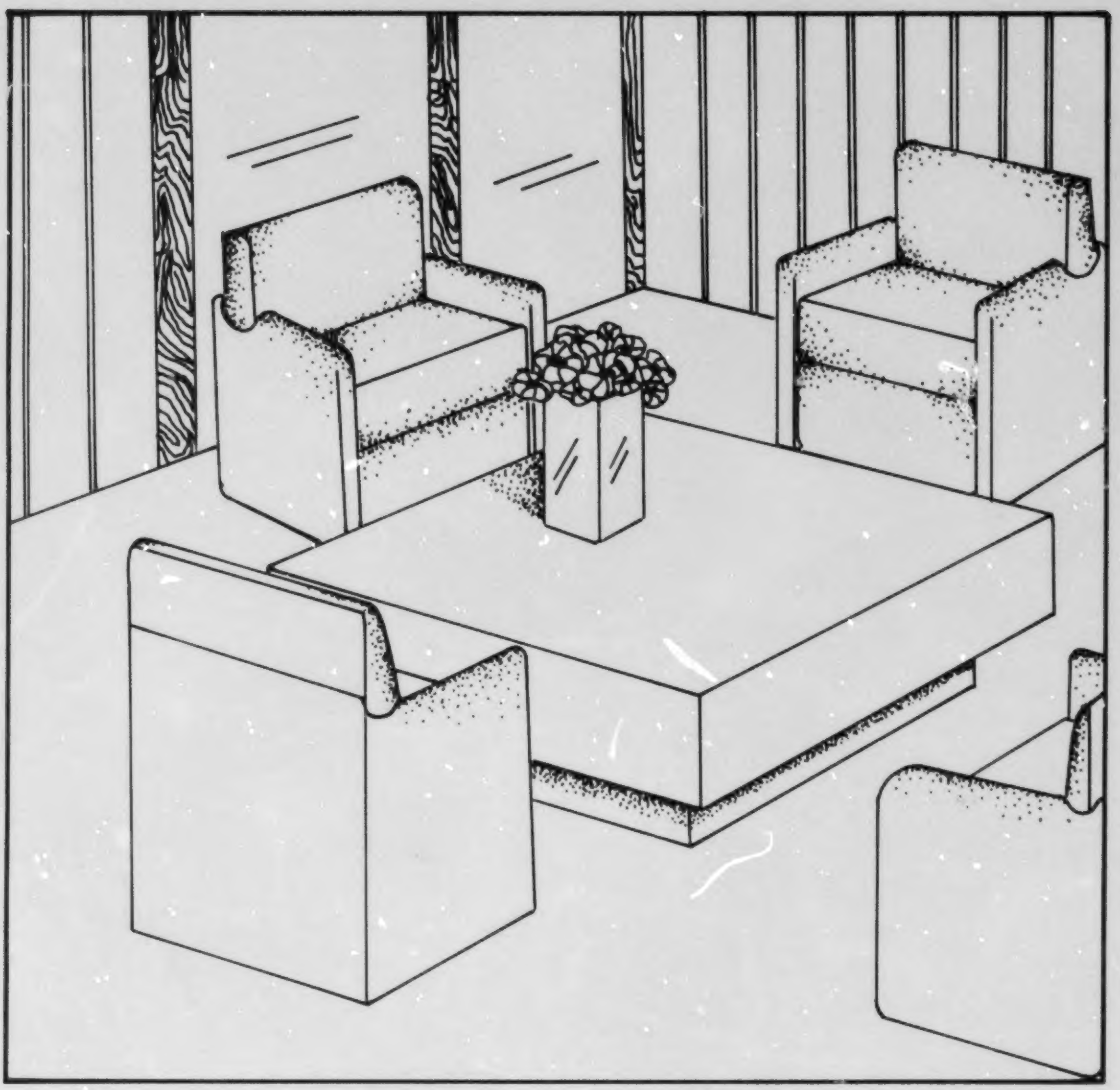
_____________________________ HAS IDENTICAL OBJECTS ARRANGED SIMILARLY ON EITHER SIDE OF AN IMAGINARY LINE.

ELEMENTS AND PRINCIPLES OF DESIGN (CONT.)



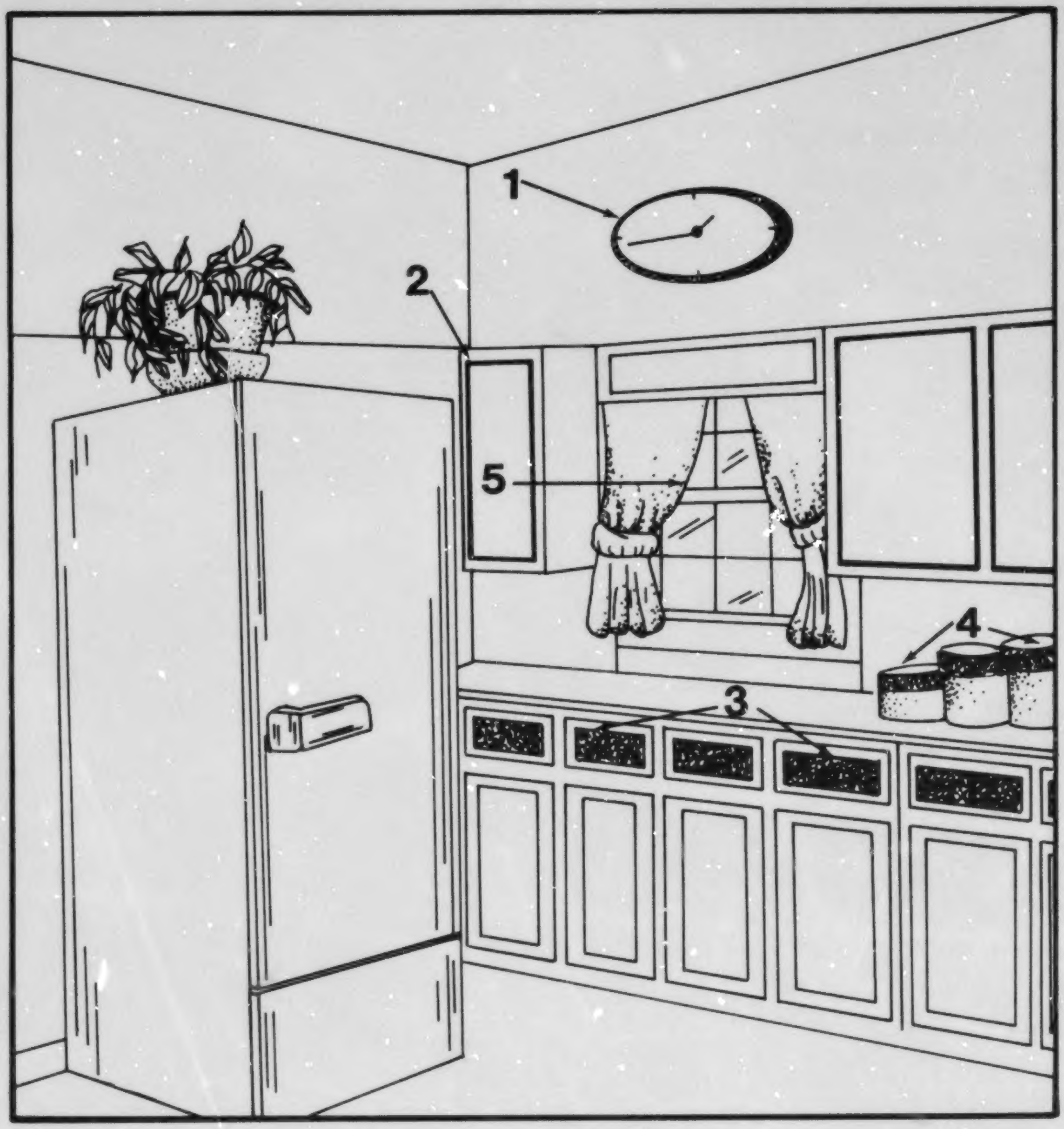
______________________________ HAS OBJECTS OF DIFFERENT SIZE, SHAPE, OR COLOR ARRANGED ON EITHER SIDE OF AN IMAGINARY LINE.

ELEMENTS AND PRINCIPLES OF DESIGN (CONT.)



____________________ ________________ HAS ALL ELEMENTS OF A DESIGN RADIATING FROM A REAL OR IMAGINARY CENTRAL POINT.

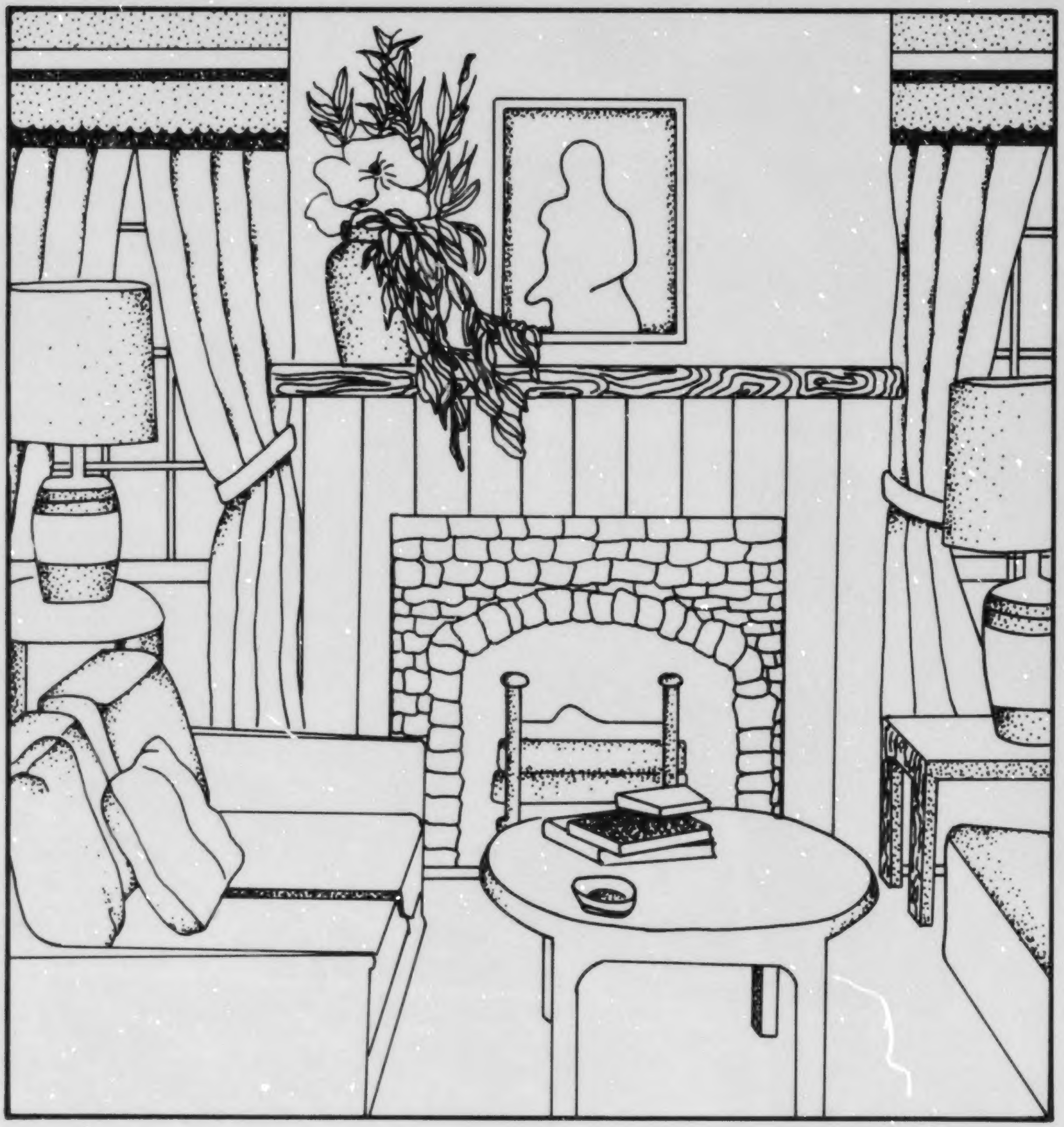
ELEMENTS AND PRINCIPLES OF DESIGN (CONT.)



______________________ IS RELATED MOVEMENT WHICH LEADS THE EYE SMOOTHLY AND EASILY FROM ONE PART OF THE DESIGN TO ANOTHER, PROVIDES A SENSE OF ORDER AND A QUALITY OF GRACEFULNESS, AND MAY BE ACHIEVED IN FIVE WAYS:

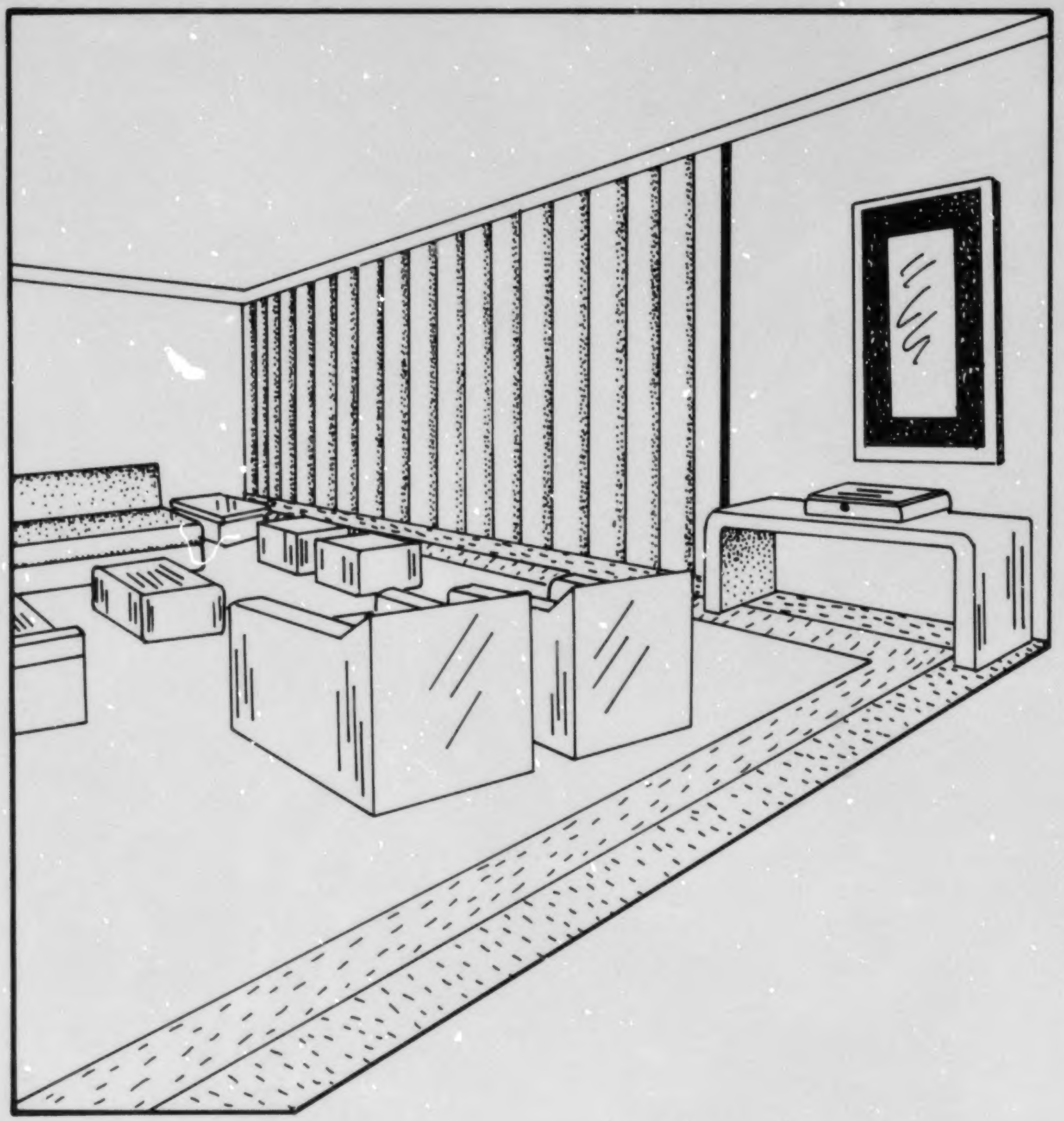
(1)____________________, (2)____________________, (3)____________________,
(4)____________________, (5)____________________.

ELEMENTS AND PRINCIPLES OF DESIGN (CONT.)



THE FIREPLACE IS AN EXAMPLE OF ____________________ WHICH IS THE FOCAL POINT OF THE ROOM.

ELEMENTS AND PRINCIPLES OF DESIGN (CONT.)



____________________ TIES ALL THE ELEMENTS AND PRINCIPLES OF DESIGN TOGETHER IN A GOOD DESIGN. IT OCCURS WHEN ALL THE PARTS OF A DESIGN ARE RELATED.

ELEMENTS AND PRINCIPLES OF DESIGN SEEK-N-FIND

DIRECTIONS: Complete the elements and principles seek-and-find by circling the hidden words to identify various terms associated with the elements and principles of design. Refer to words listed below.

P R O A N S P A C E T N T W
E R S H E J V E J C A B L E
G C O L O R I M O N U S M X
I H S P C O L E I A L P A O
T U Z E O H C H X L I N E S
M H T Y H R O A L A N O M E
R A H F L C T S S B E N M O
O E M S W E V I P F A E X I
F L T A X B S S O T E S A S
N C R T H T O P U N I T E Y
U T U L Y R K T I D S R T O
T R N I W M O P G I U S R T
E M P H A S I S O Y T I N U

WORDS:

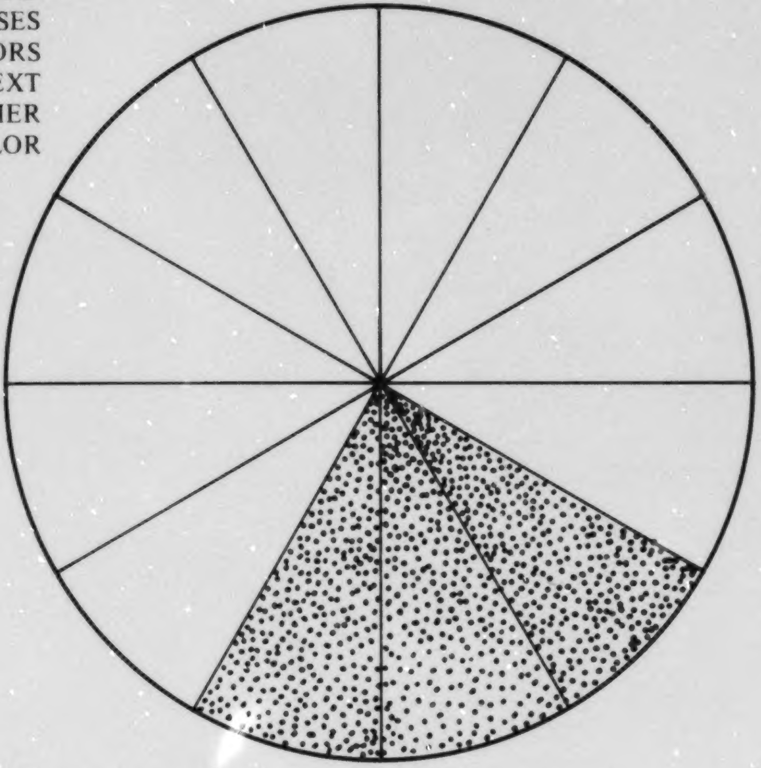
balance
color
emphasis
form
lines

proportion
rhythm
space
texture
unity

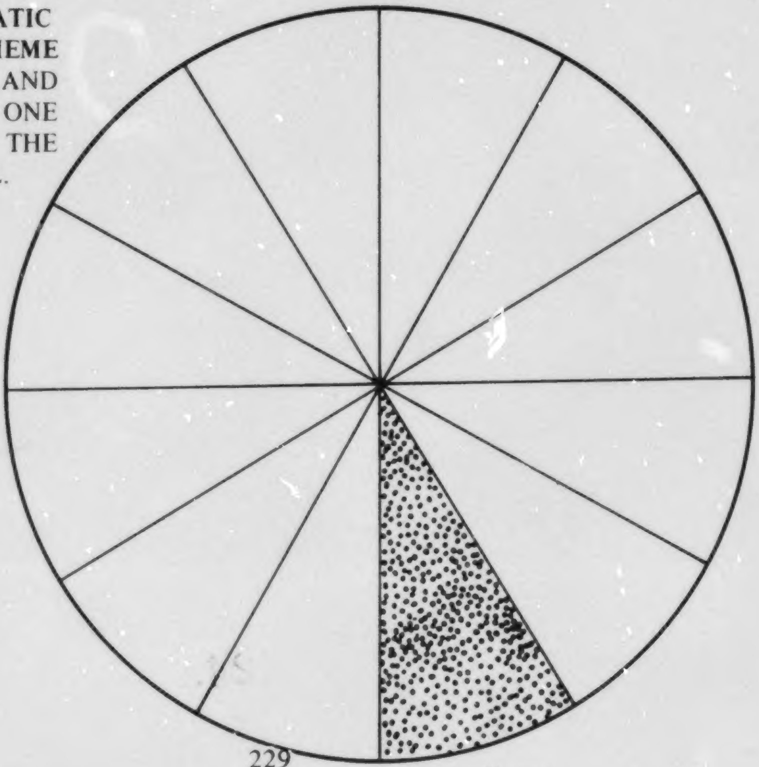
243

RELATED COLOR SCHEMES (ARE BASED ON ONE COLOR)

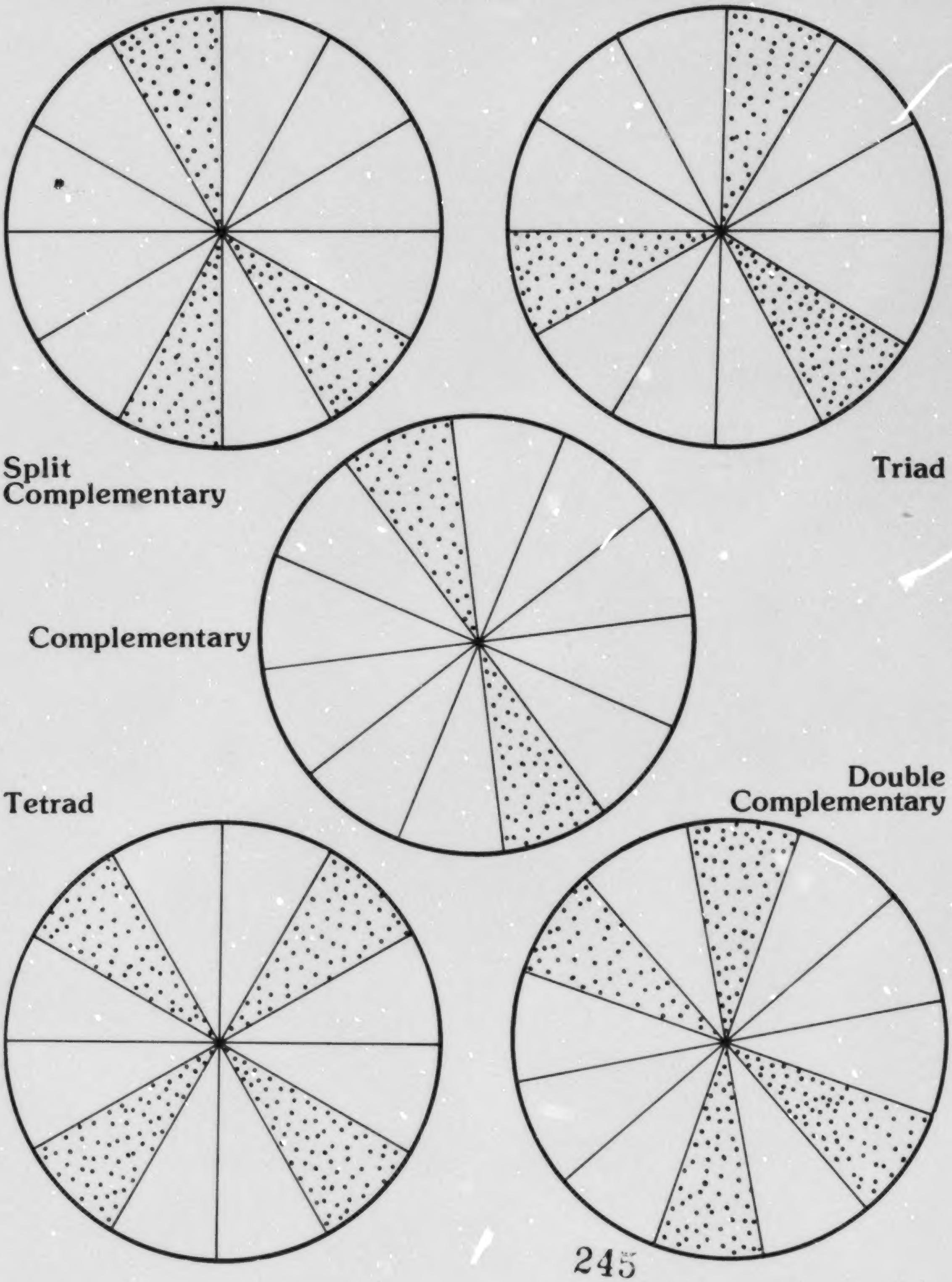
ANALOGOUS COLOR SCHEME USES THREE COLORS THAT ARE NEXT TO EACH OTHER ON THE COLOR WHEEL.



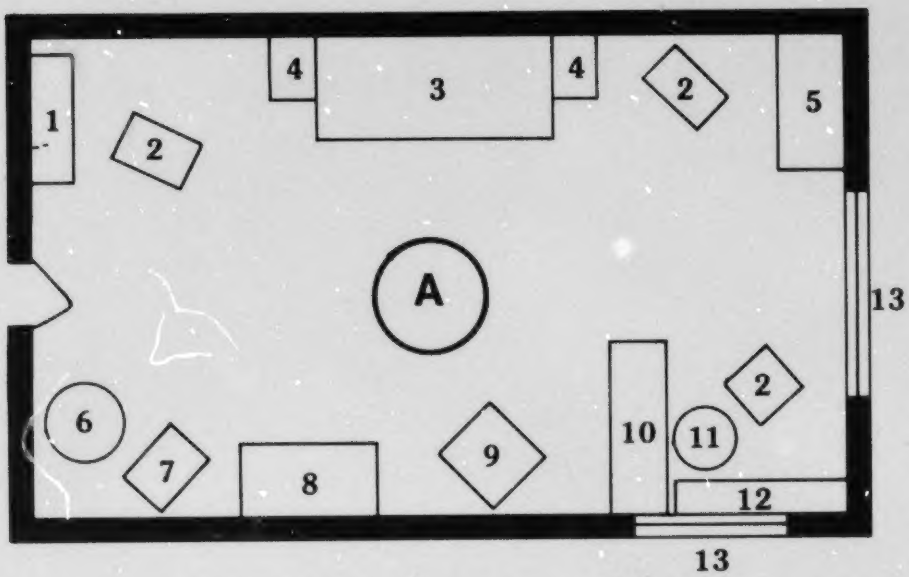
MONOCHROMATIC COLOR SCHEME USES TINTS AND SHADES OF ONE COLOR ON THE COLOR WHEEL.



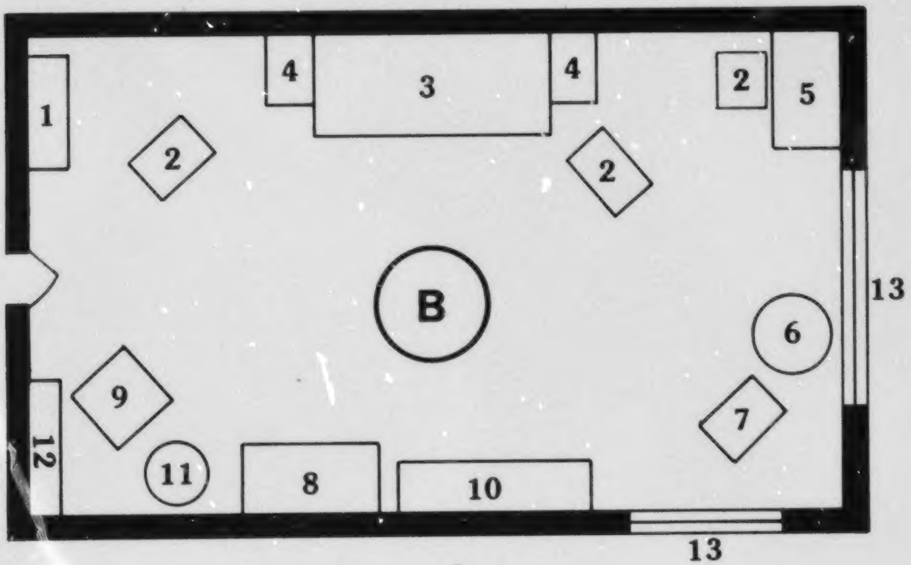
CONTRASTING COLOR SCHEMES


Split Complementary
Triad
Complementary
Tetrad
Double Complementary

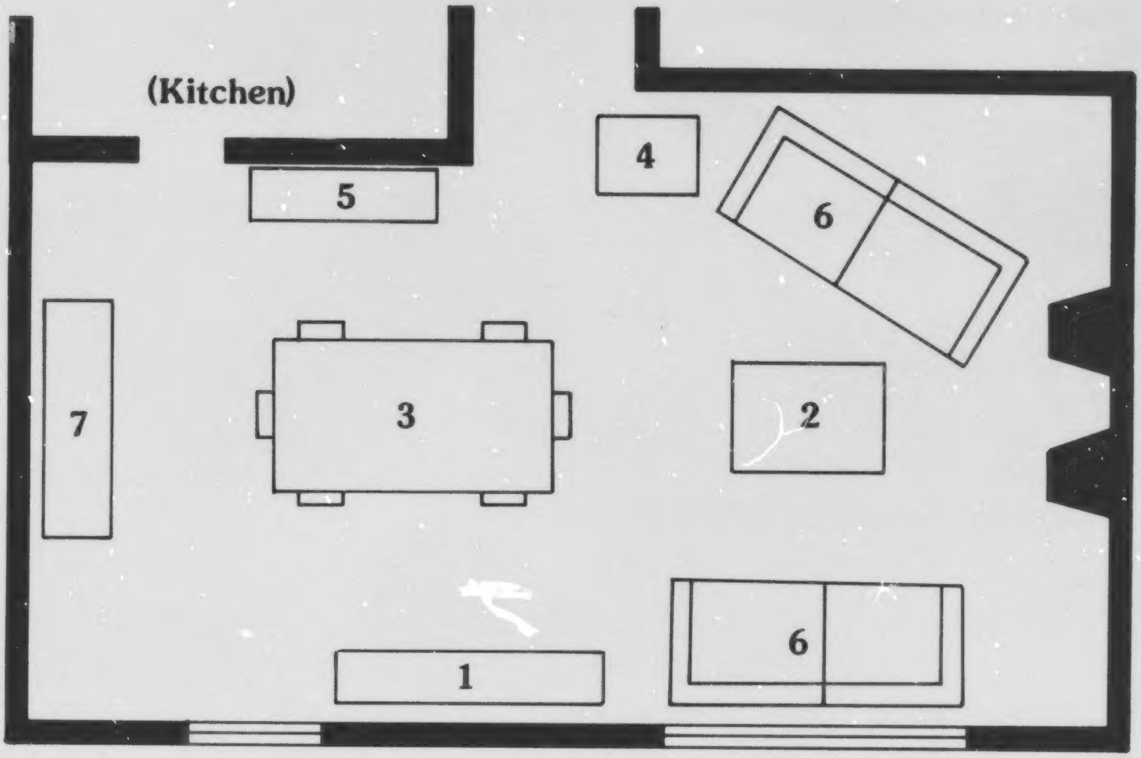
VARIATIONS IN FURNITURE ARRANGEMENTS


A
1
2
3
4
4
2
5
13
2
10
11
12
6
7
8
9
13

1) CONSOLE AND MIRROR, 2) CHAIR, 3) SOFA(90"), 4) END TABLE, 5) DESK, 6) TABLE, 7) WING CHAIR, 8) TV-STEREO SYSTEM, 9) LOUNGE CHAIR, 10) LONG LOW CHEST, 11) LAMP, 12) BOOKS, 13) WINDOW.

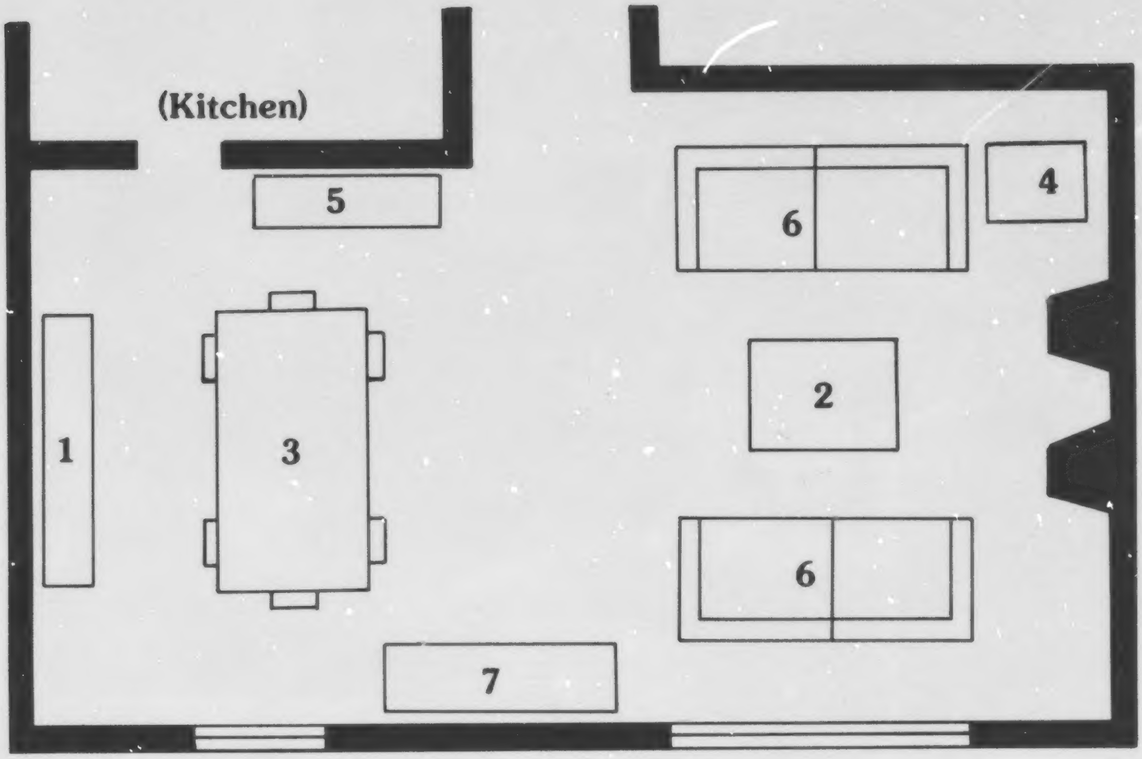

B
1
4
3
4
2
5
2
2
13
6
7
9
12
11
8
10
13

FURNITURE ARRANGEMENT


(Kitchen)
4
5
6
7
3
2
6
1

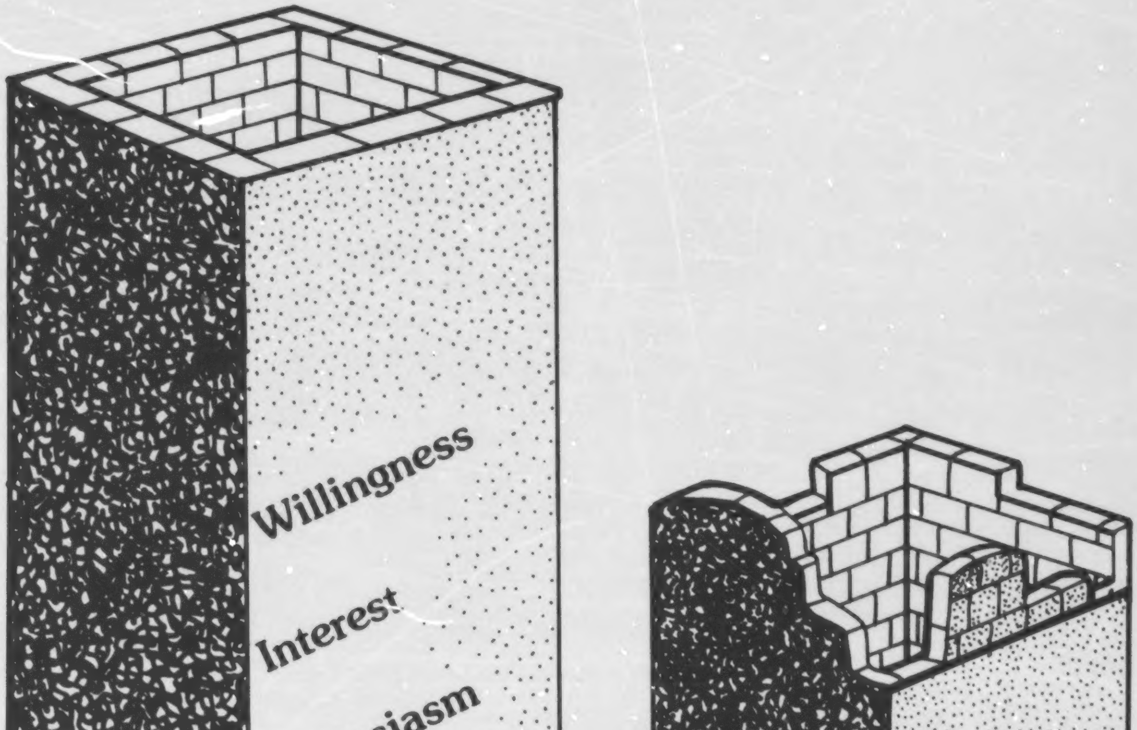
1. Buffet
2. Coffee Table
3. Dining Table and Chairs
4. End Table
5. Serving Cart
6. Sofa
7. Stereo-Tape Deck Console

FURNITURE ARRANGEMENT (CONT.)


(Kitchen)
5
6
4
2
1
3
6
7

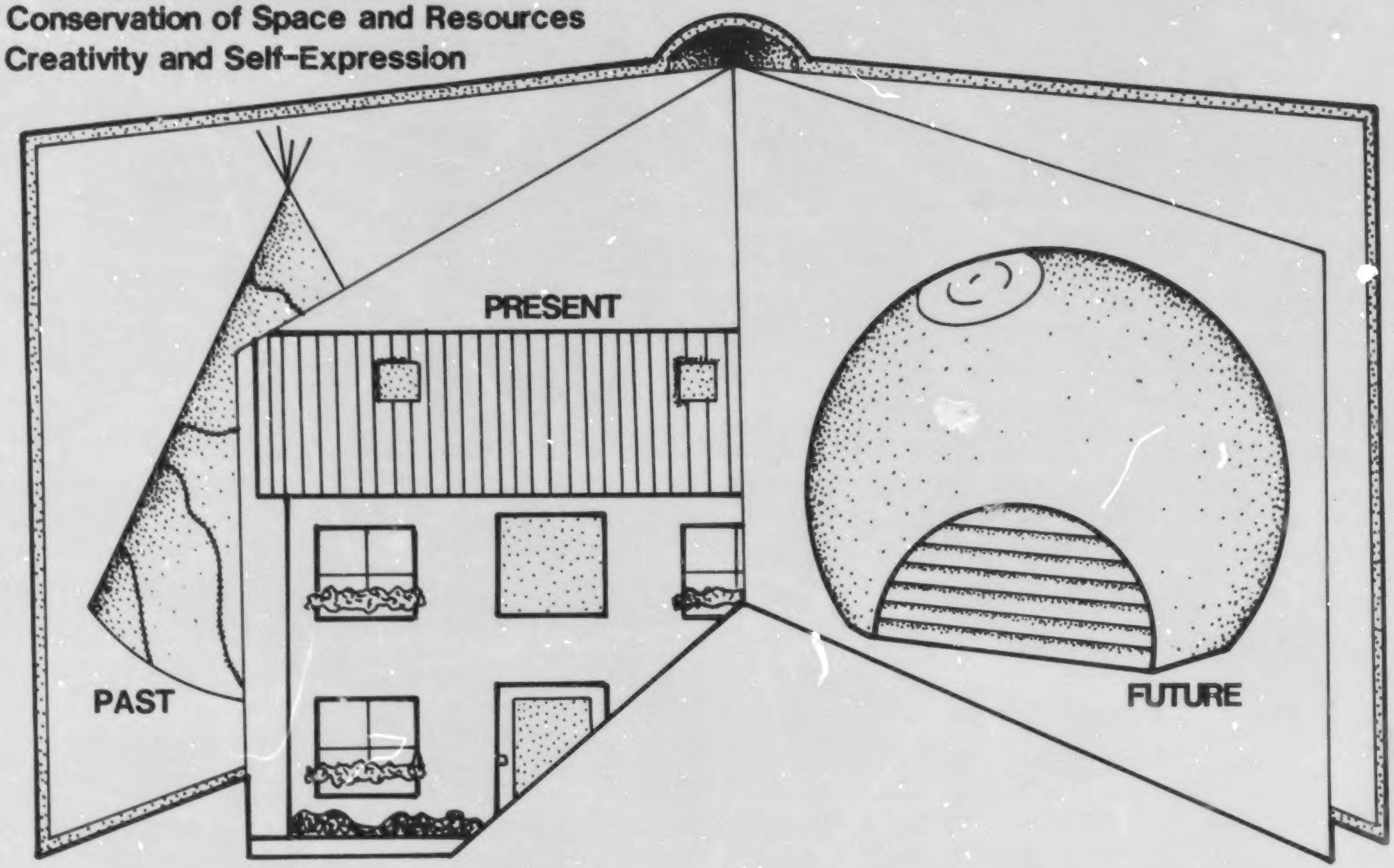
1. Buffet
2. Coffee Table
3. Dining Table and Chairs
4. End Table
5. Serving Chart
6. Sofa
7. Stereo-Tape Deck Console

ATTITUDES FOR SUCCESS – POSITIVE AND NEGATIVE


Willingness
Interest
Enthusiasm
Loyalty
Optimism
Cooperation
Carelessness
Criticism
Indifference
Boredom
Laziness
Disrespect
Impatience
Uncooperative

FUNCTIONS OF HOUSING THROUGH THE AGES

Health and Safety
Protection and Security
Conservation of Space and Resources
Creativity and Self-Expression


PRESENT
PAST
FUTURE

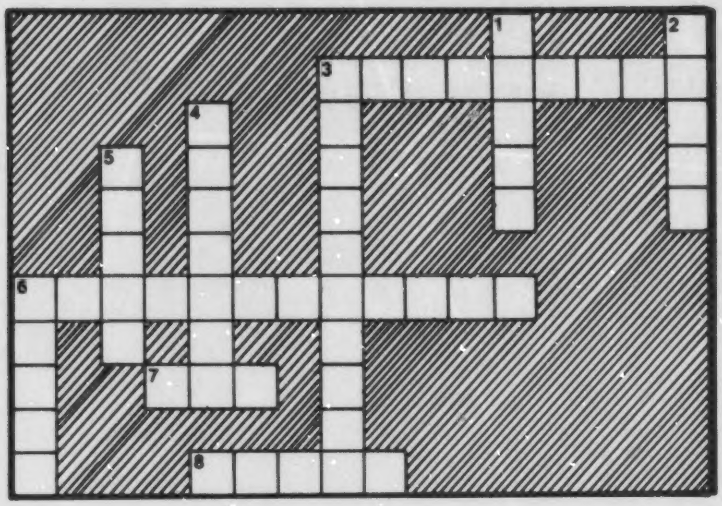
HOUSING NEEDS

PHYSIOLOGICAL	SOCIOLOGICAL	PSYCHOLOGICAL
Protection	Entertainment	Creativity
Odor Control	Privacy	Comfort
Temperature Control	Food Service	Peace
Growth		Relaxation
Color		Self-Expression
Health		Security
Sound		Privacy
Privacy		Beauty
Space		Order
Light		Pride

T-50

PRINCIPLES OF STORAGE

DIRECTIONS: Complete the crossword puzzle by filling in words related to the principles of storage.



ACROSS:

3. ______________________ inexpensive materials and equipment needed in more than one place.

6. Use all dimensions of ______________ ____________. (2 words)

7. Store items so they are easy to ________________.

8. Provide room at top and sides so items are easy to _________________.

DOWN:

1. Items should be stored at point of ________________ use.

2. Frequently stored items should be easy to ________________.

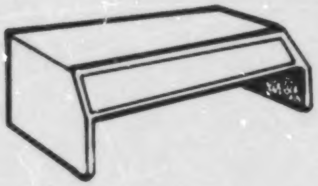
3. Stack only items with same _________________.

4. Stored items should be easy to ________________.

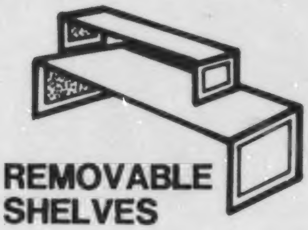
5. Store heavy items near the height of the ________________.

6. Do not __________________ unlike items.

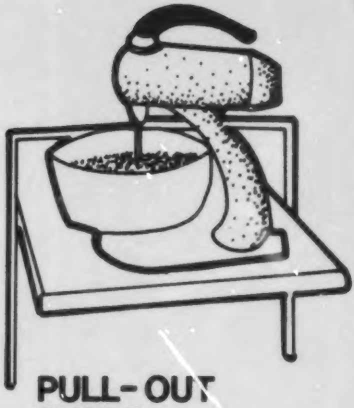
STORAGE DEVICES



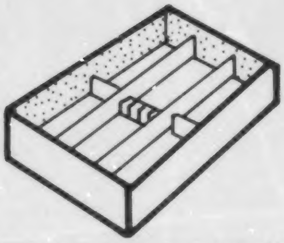
STEP SHELF



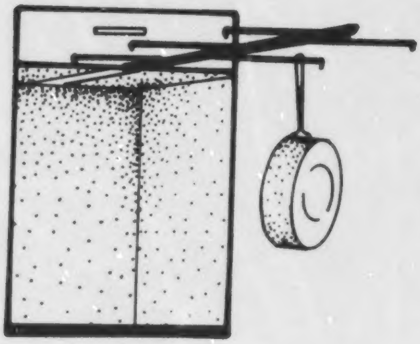
REMOVABLE SHELVES



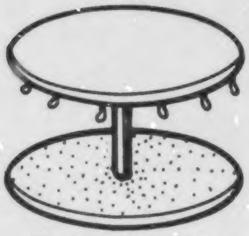
PULL-OUT SHELF



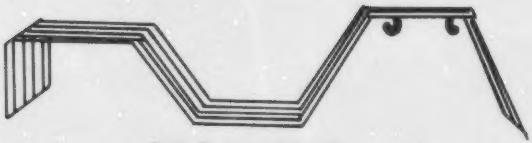
DRAWER DIVIDER KNIFE RACK



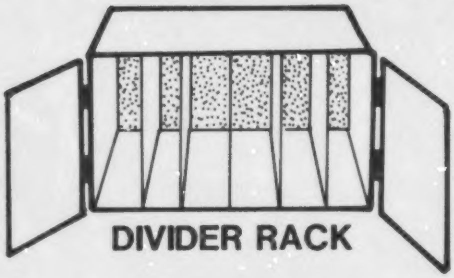
PULL-OUT RACK



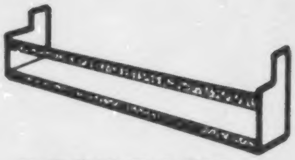
TURNTABLE



ORGANIZER RACK

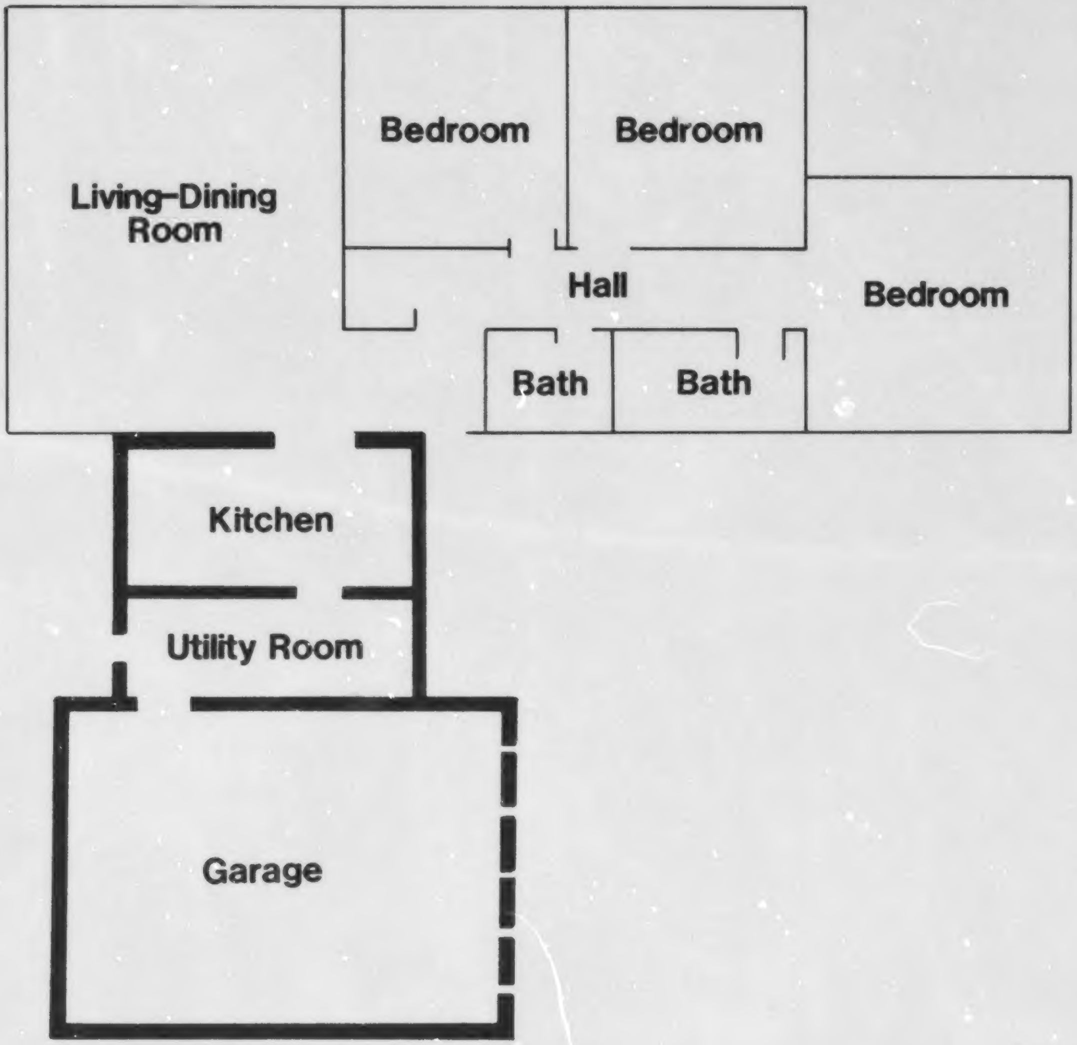


DIVIDER RACK



DOOR RACK

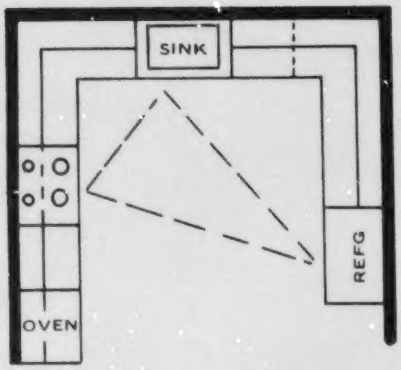
WORK AREAS


Living-Dining Room
Bedroom
Bedroom
Hall
Bedroom
Bath
Bath
Kitchen
Utility Room
Garage

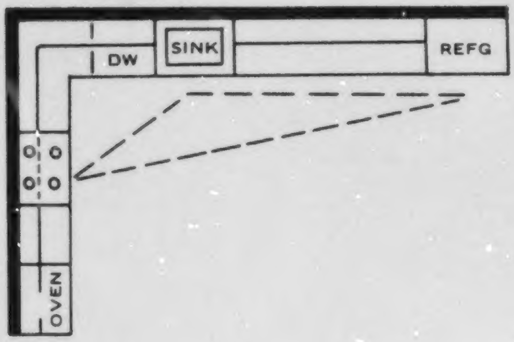
KITCHEN PLANNING

- Basic Shapes
- Equipment Arrangement
- Work Triangle

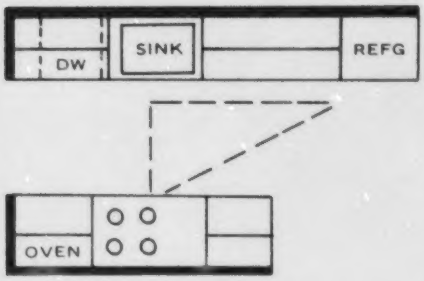
U SHAPE


SINK
REFG
OVEN

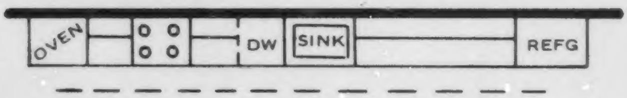
L SHAPE

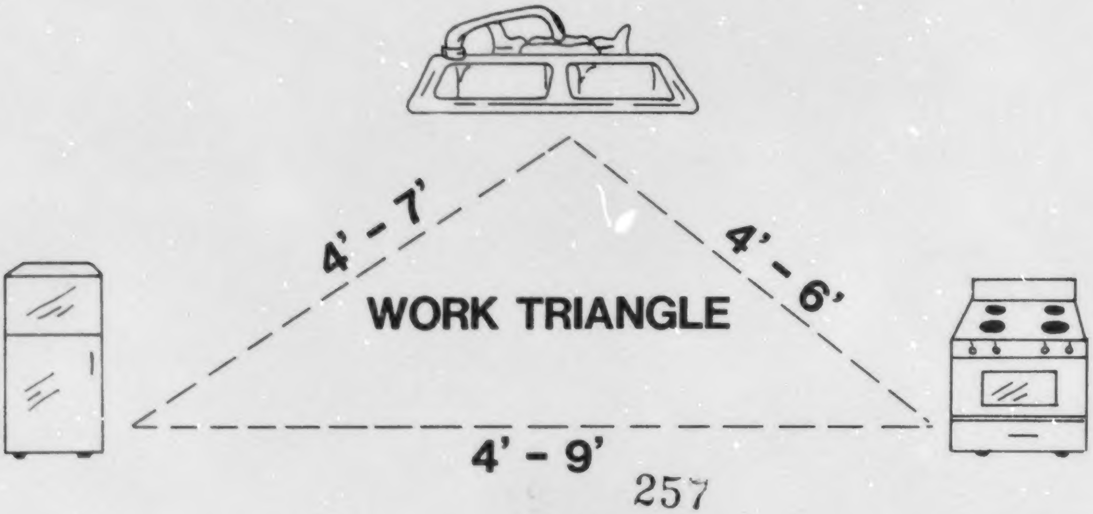

DW
SINK
REFG
OVEN

CORRIDOR SHAPE

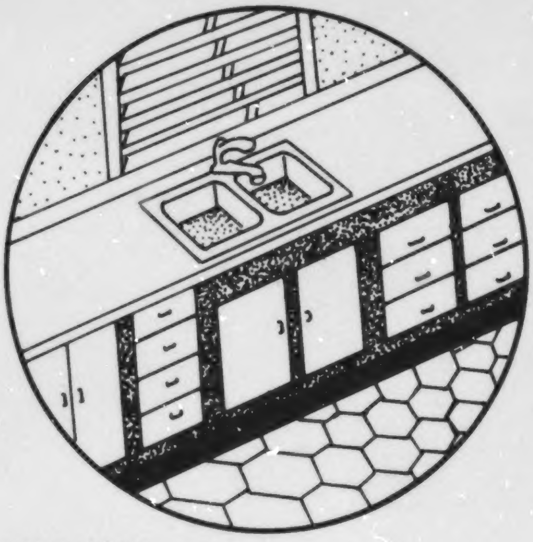

DW
SINK
REFG
OVEN

ONE WALL

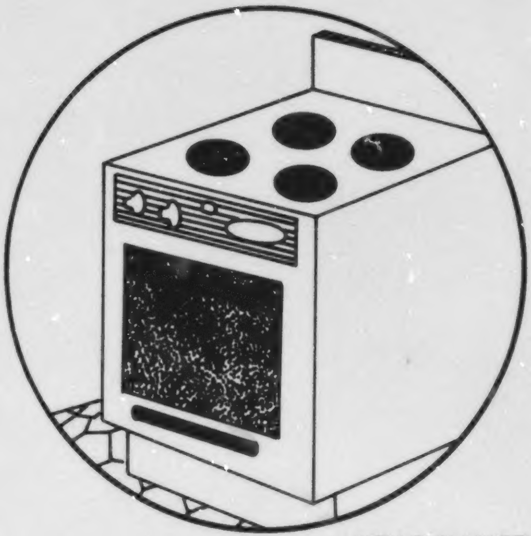

OVEN
DW
SINK
REFG


4' - 7'
4' - 6'
WORK TRIANGLE
4' - 9'

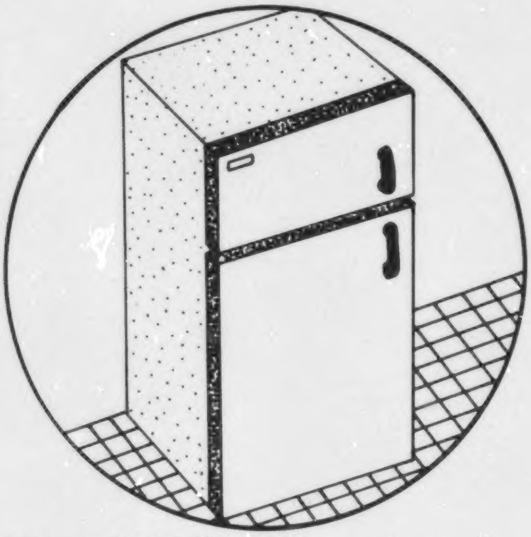
KITCHEN STORAGE



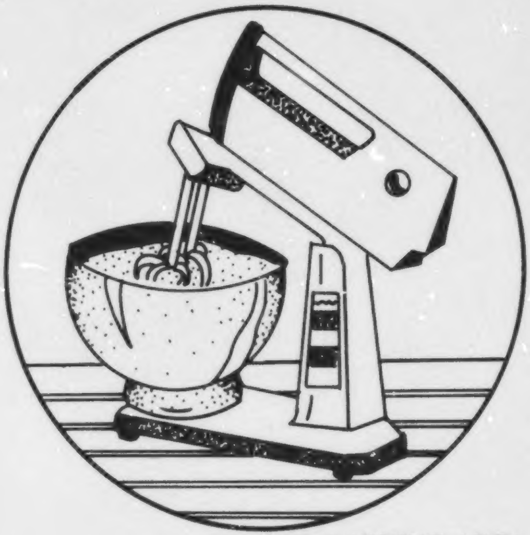
NEAR SINK
Equipment first used with water
Supplies used in clean-up
Trash and garbage containers
Dish cloths and paper towels
Dishes



NEAR RANGE
Cookware
Small cooking utensils
Canned goods, dry goods, and
seasonings used in cooking



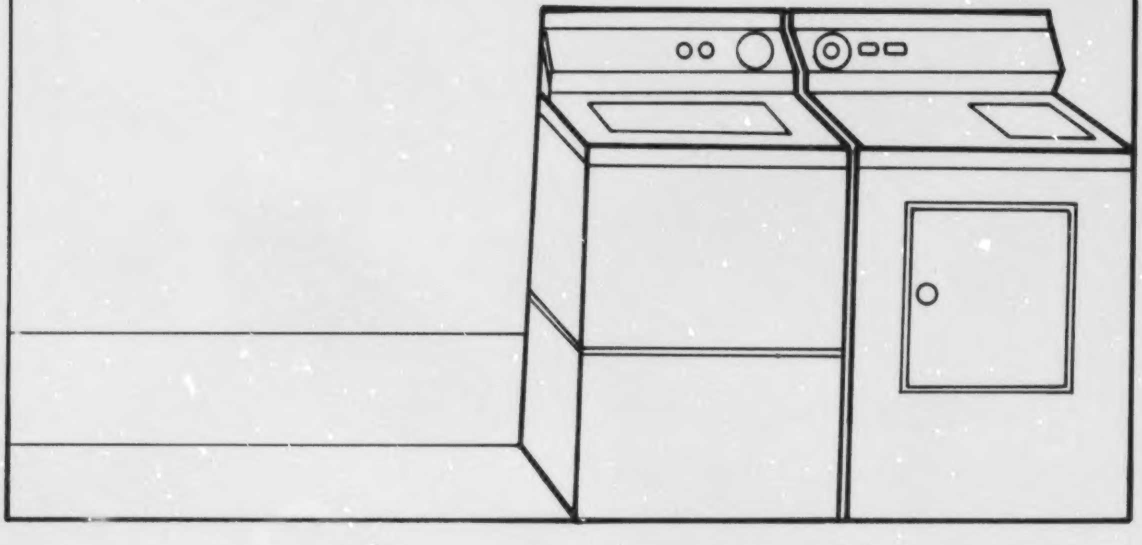
NEAR REFRIGERATOR/ FREEZER
Wrapping products
Storage containers
Can opener and small equipment
for preparing food from the
refrigerator/freezer



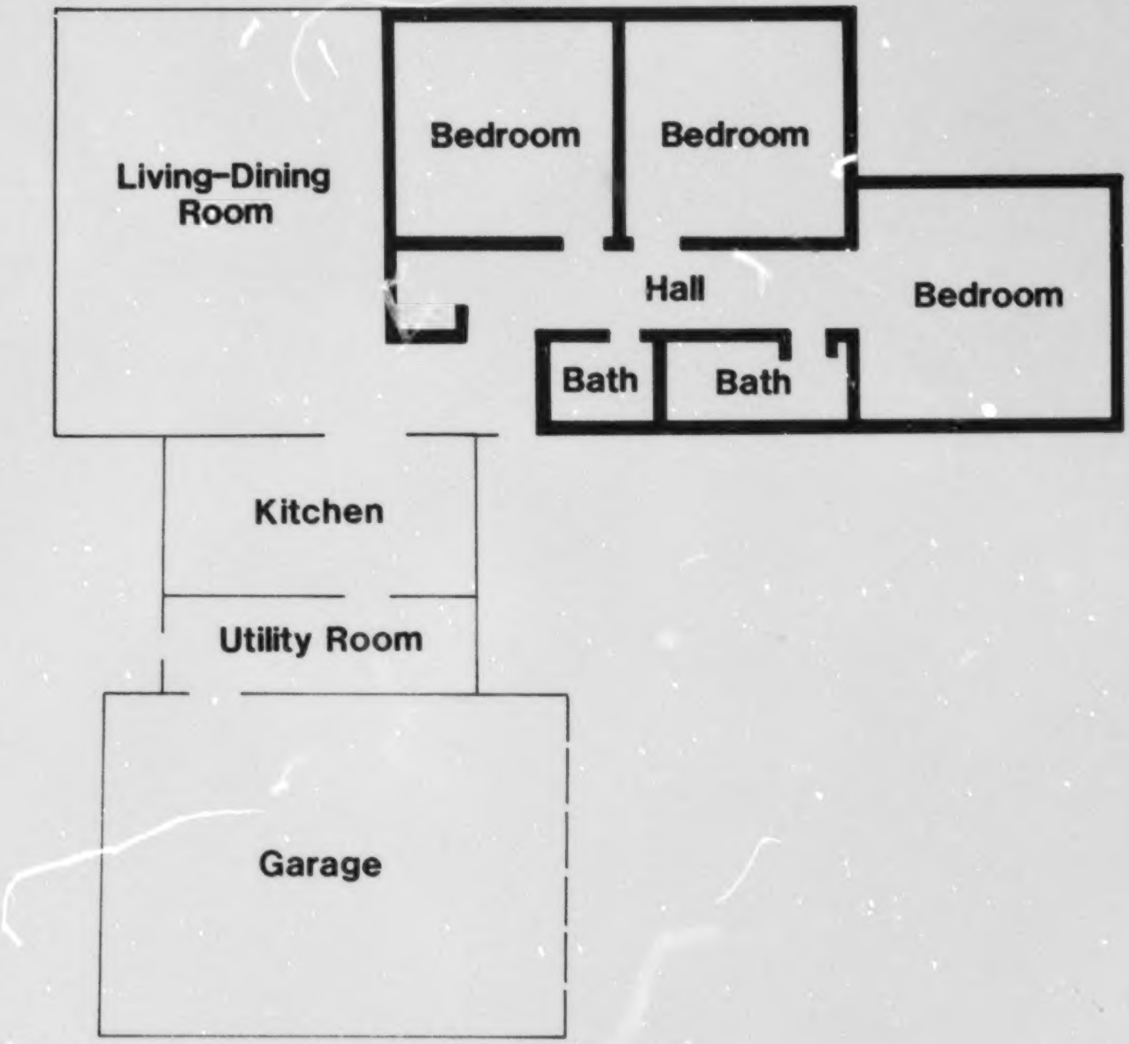
NEAR MIXING AREA
Mixer
Mixer bowls and utensils
Baking pans and utensils
Staples, spices, and food mixes

LAUNDRY SPACE

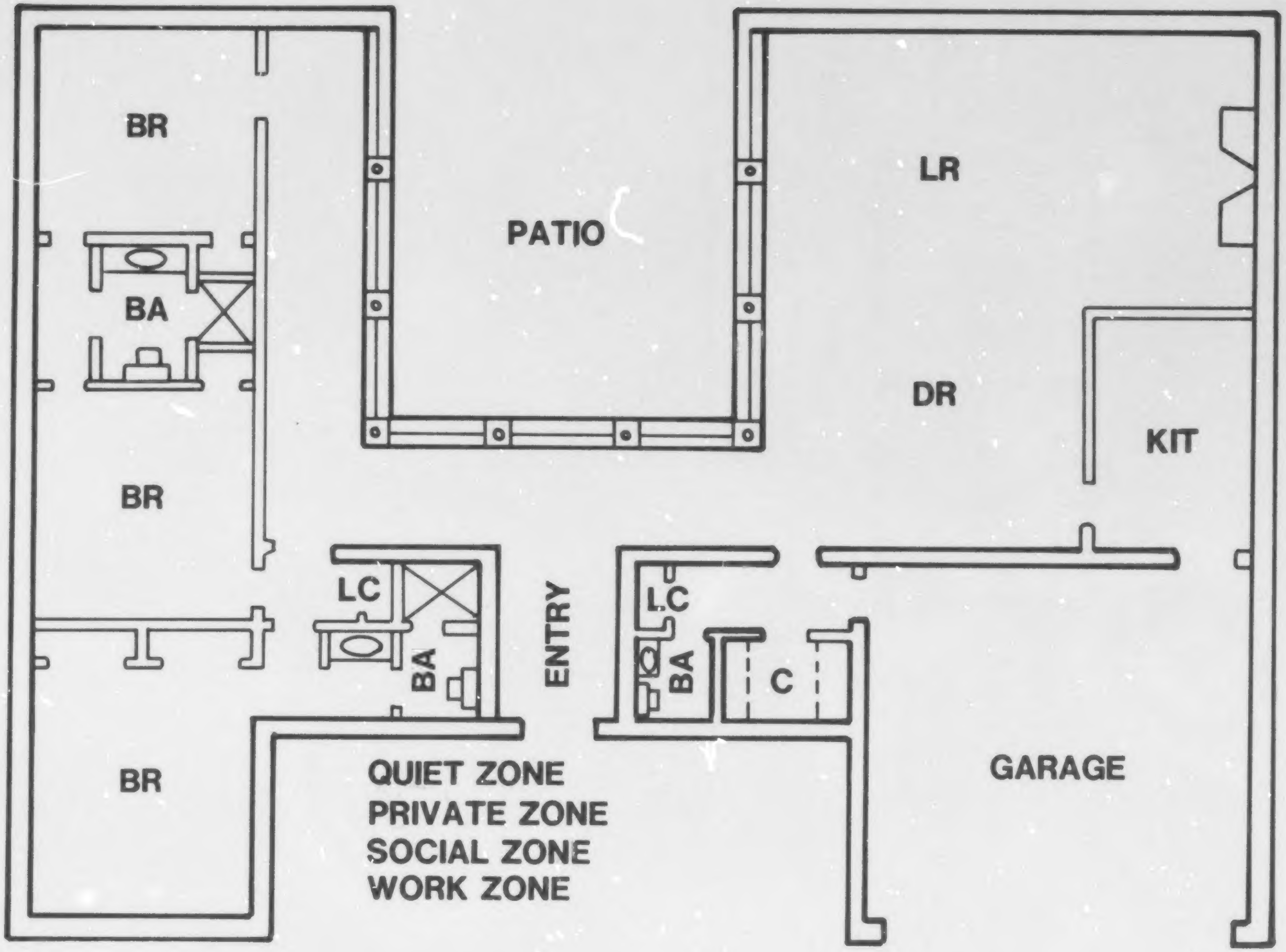
Facilities for Collecting Laundry
Space for Sorting Laundry
Space for Storing Laundry Supplies
Sink for Pre-treating Laundry
Space for Washer and Dryer
Place to Hang Garments
Table for Folding Clothes
Facilities for Ironing or Pressing



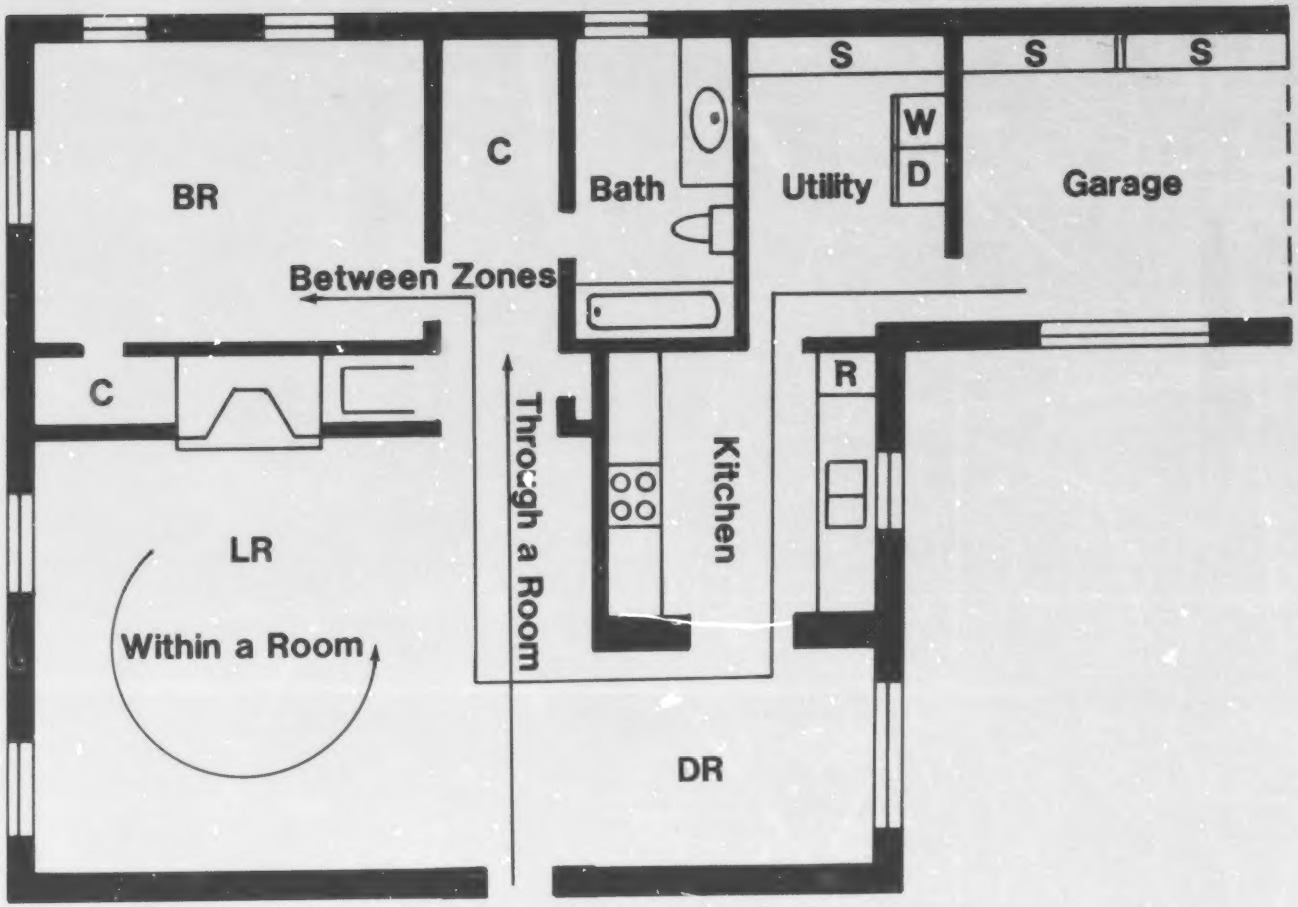
QUIET AREAS


Living-Dining Room
Bedroom
Bedroom
Hall
Bedroom
Bath
Bath
Kitchen
Utility Room
Garage

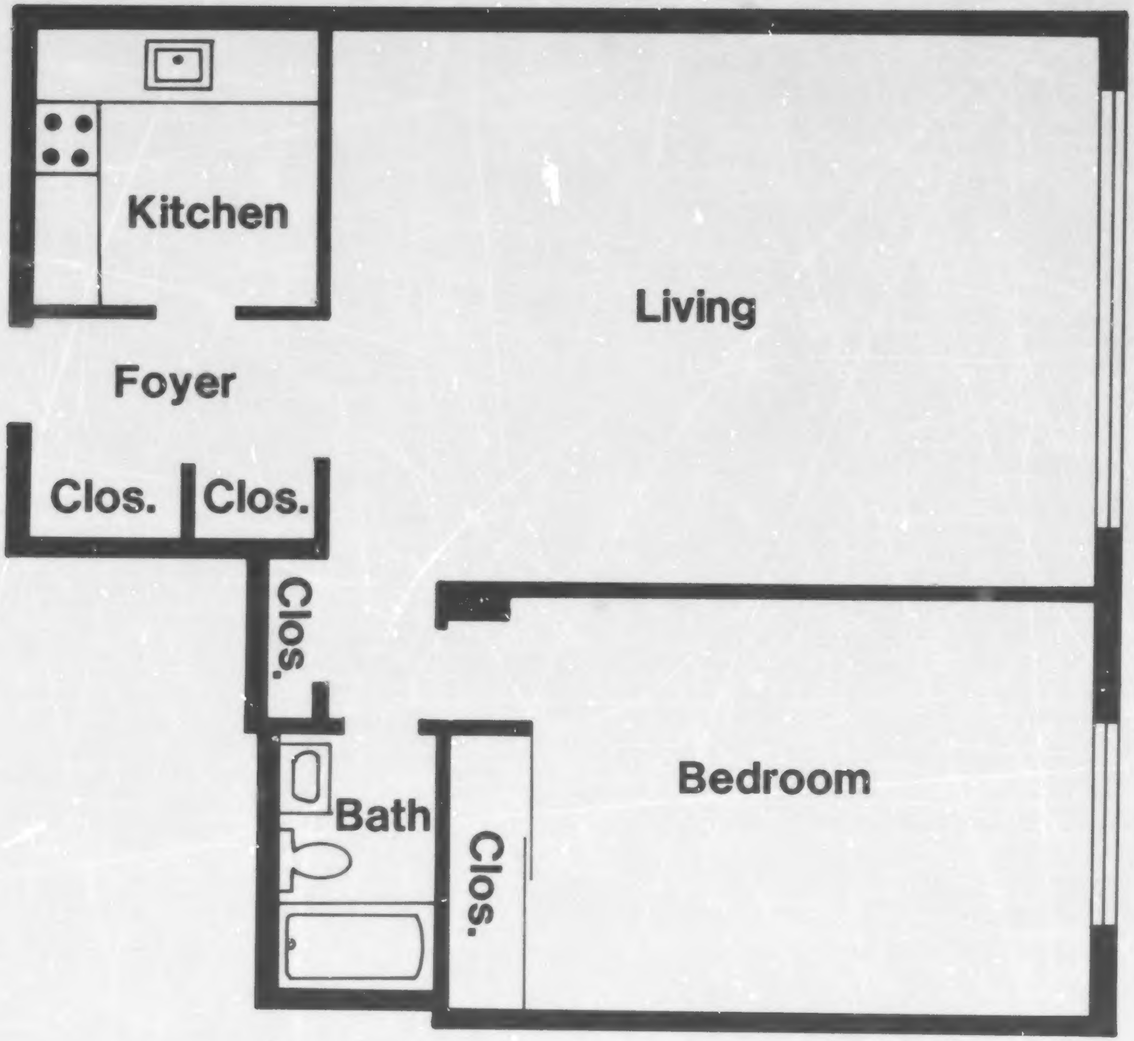
ZONES IN HOUSING


BR
BA
BR
BR
LC
BA
PATIO
ENTRY
LC
BA
C
LR
DR
KIT
GARAGE
QUIET ZONE
PRIVATE ZONE
SOCIAL ZONE
WORK ZONE

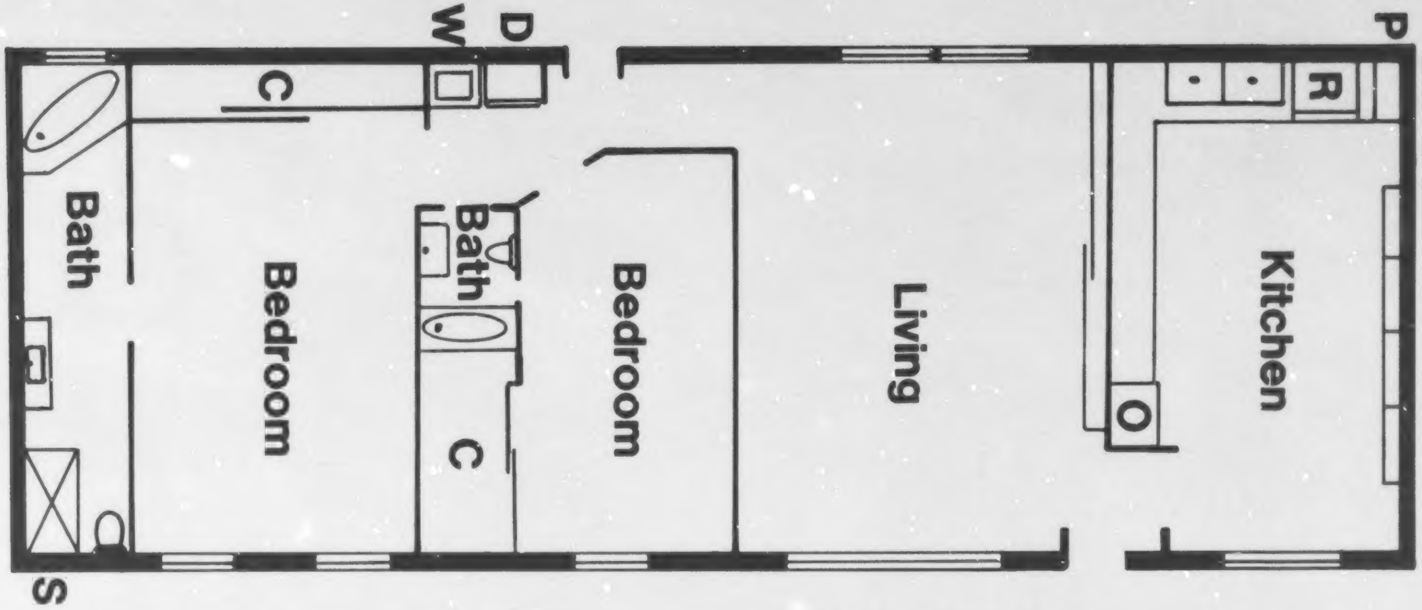
CIRCULATION


S
S
S
C
BR
Bath
Utility
W
D
Garage
Between Zones
C
R
Kitchen
Through a Room
LR
Within a Room
DR

FLOOR PLAN A


Kitchen
Living
Foyer
Clos.
Clos.
Clos.
Bath
Clos.
Bedroom

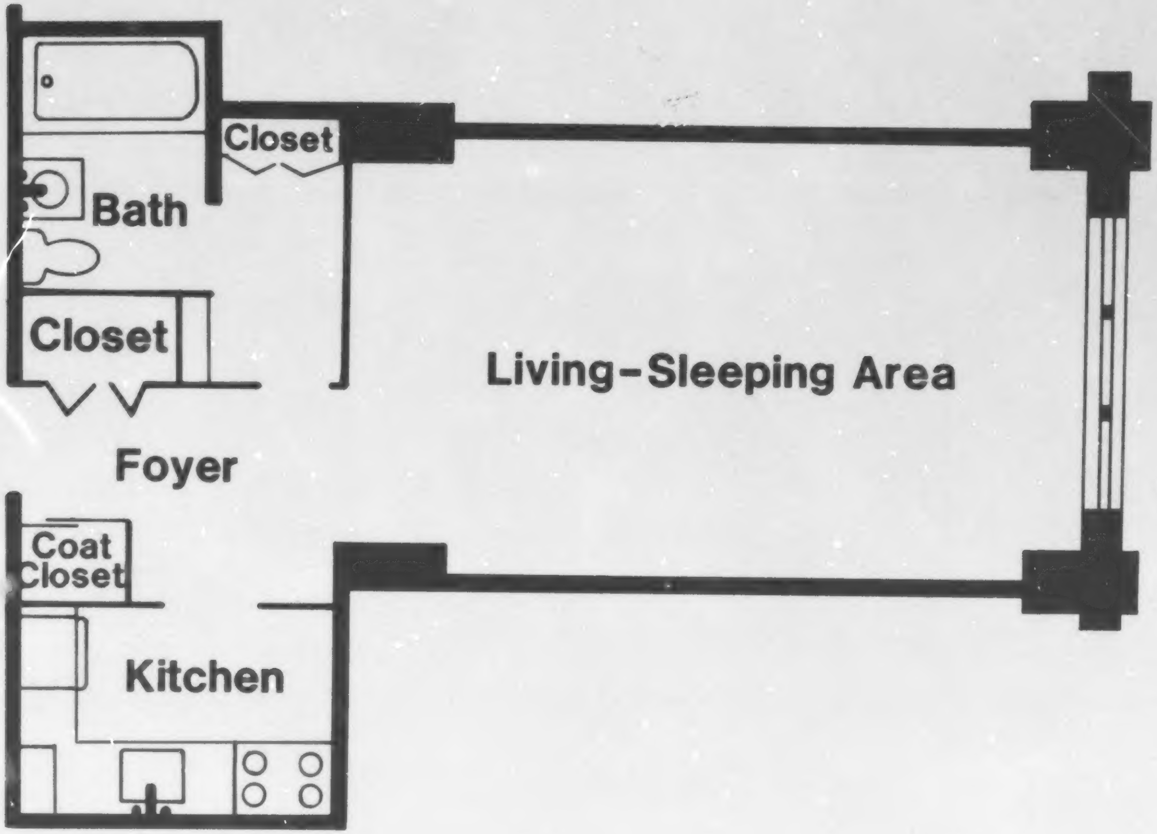
FLOOR PLAN B



D
W
P
C
Bath
Bedroom
Bath
C
Bedroom
Living
R
O
Kitchen
S

C–Closet
D–Dryer
O–Oven
P–Pantry
R–Refrigirator
S–Shower
W–Washer

FLOOR PLAN C


Closet
Bath
Closet
Living-Sleeping Area
Foyer
Coat Closet
Kitchen

RENTING OR HOME OWNERSHIP SEEK - N - FIND

DIRECTIONS: Complete the renting or home ownership seek-and-find by circling the hidden words to identify terminology associated with renting or buying a home. Refer to words listed below.

O	R	E	A	A	T	I	S	B	L	E	G	O	D	I	N	T	O	P	E	S
W	H	I	R	P	R	I	N	C	I	P	A	L	E	N	S	O	D	E	E	D
E	L	N	O	P	O	T	L	W	E	I	E	O	E	S	C	R	O	W	L	Y
I	N	T	E	R	E	S	T	X	N	A	O	N	T	L	C	E	W	P	O	Y
T	H	E	I	A	S	T	L	N	S	T	O	R	A	E	S	A	N	A	O	L
S	O	N	X	I	P	R	E	E	A	L	R	R	K	G	E	N	P	L	A	B
B	U	A	B	S	T	R	A	C	T	I	E	M	O	R	T	G	A	G	E	E
A	S	N	O	A	N	M	O	R	T	T	A	S	P	I	L	E	Y	S	A	E
N	O	T	E	L	E	L	O	G	A	E	L	O	L	G	Y	E	M	A	O	L
M	O	R	T	A	R	E	A	L	E	S	T	A	T	E	A	G	E	N	C	Y
L	O	S	E	T	Q	P	L	O	C	L	O	S	I	N	G	T	N	O	S	A
E	V	I	C	T	I	O	N	M	E	S	R	E	E	Q	U	I	T	Y	I	G
T	I	M	L	Y	C	L	O	S	I	N	G	C	O	S	T	S	B	O	T	E

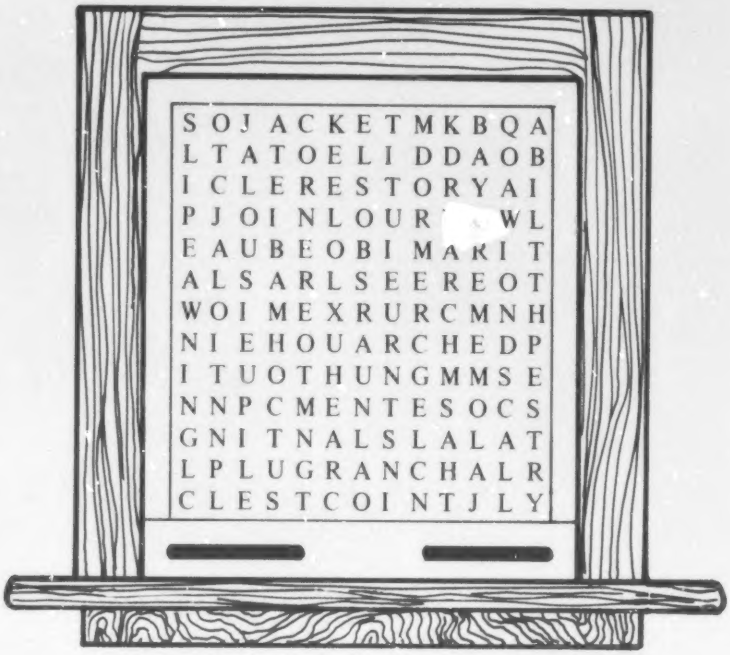
WORDS:

abstract
appraisal
closing
closing costs
collateral
deed
down payment
equity
escrow
eviction
interest
lease
lien
loan
mortgage
note
principal
real estate agency
rent
tenant

T-64

BASIC WINDOW TYPES
SEEK - N - FIND

DIRECTIONS: Complete the basic window type seek-and-find by circling the hidden words which name the window types. Refer to words listed below.

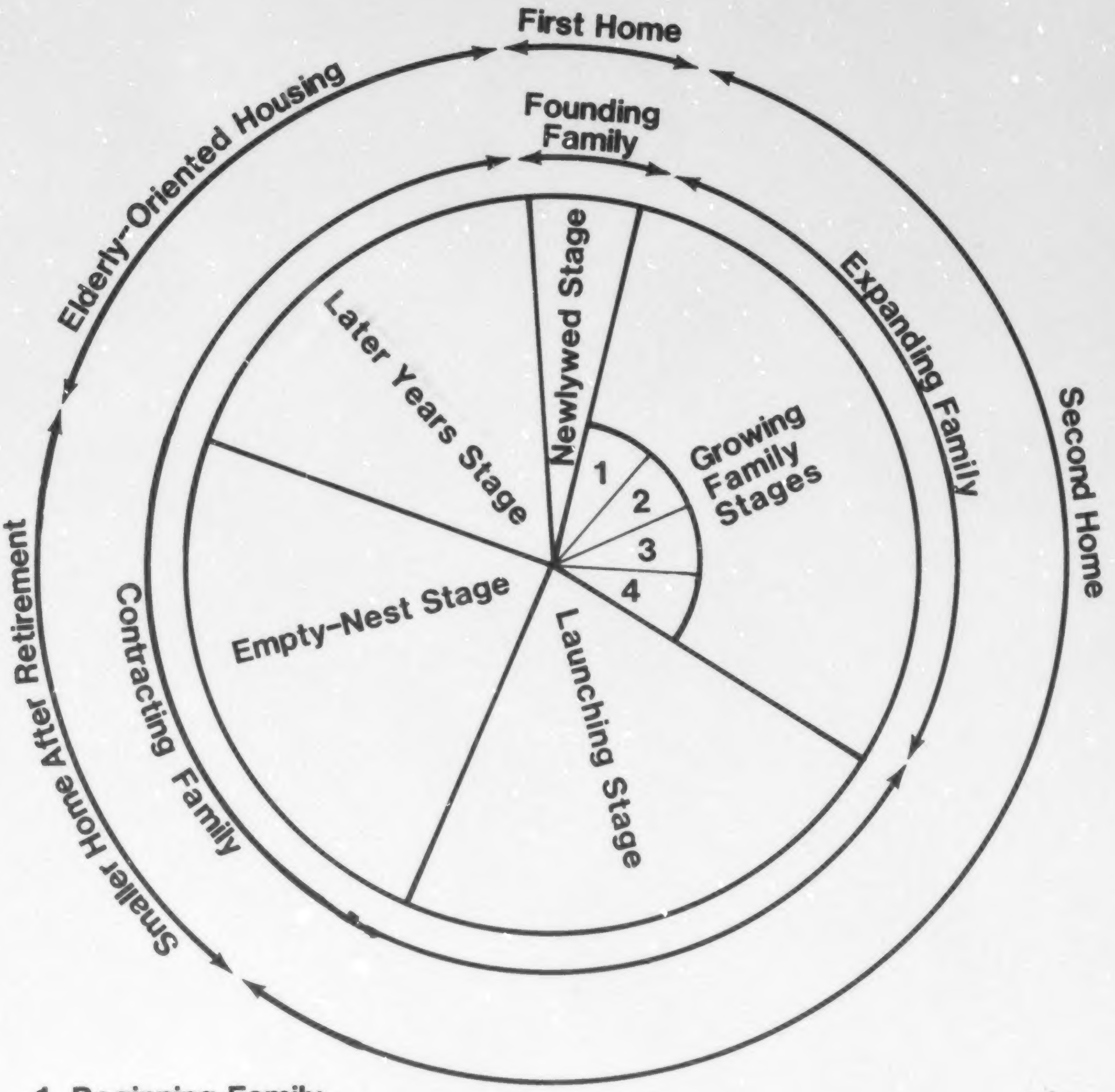


S O J A C K E T M K B Q A
L T A T O E L I D D A O B
I C L E R E S T O R Y A I
P J O I N L O U R [illegible] [illegible] W L
E A U B E O B I M A R I T
A L S A R L S E E R E O T
W O I M E X R U R C M N H
N I E H O U A R C H E D P
I T U O T H U N G M M S E
N N P C M E N T E S O C S
G N I T N A L S L A L A T
L P L U G R A N C H A L R
C L E S T C O I N T J L Y

WORDS:

arched
awning
bay
casement
clerestory
corner
dormer
doublehung
jalousie
picture
ranch
slanting

HOUSING AND THE FAMILY LIFE CYCLE


First Home
Second Home
Smaller Home After Retirement
Elderly-Oriented Housing
Founding Family
Expanding Family
Contracting Family
Newlywed Stage
Growing Family Stages
1
2
3
4
Launching Stage
Empty-Nest Stage
Later Years Stage

1. Beginning Family
2. Preschool Age
3. School - Age
4. Teenagers

PERSONAL RESOURCES

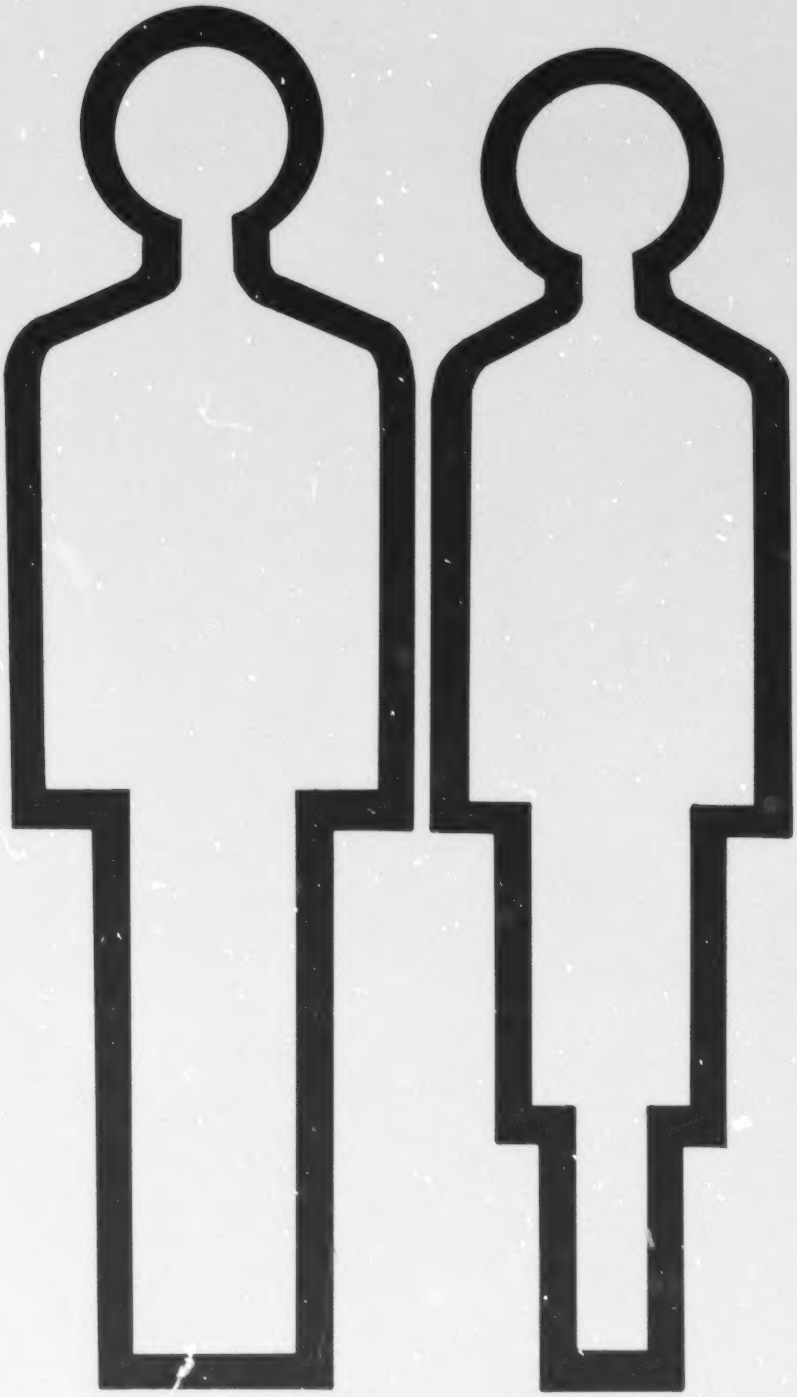
Skills

Abilities

Attitudes

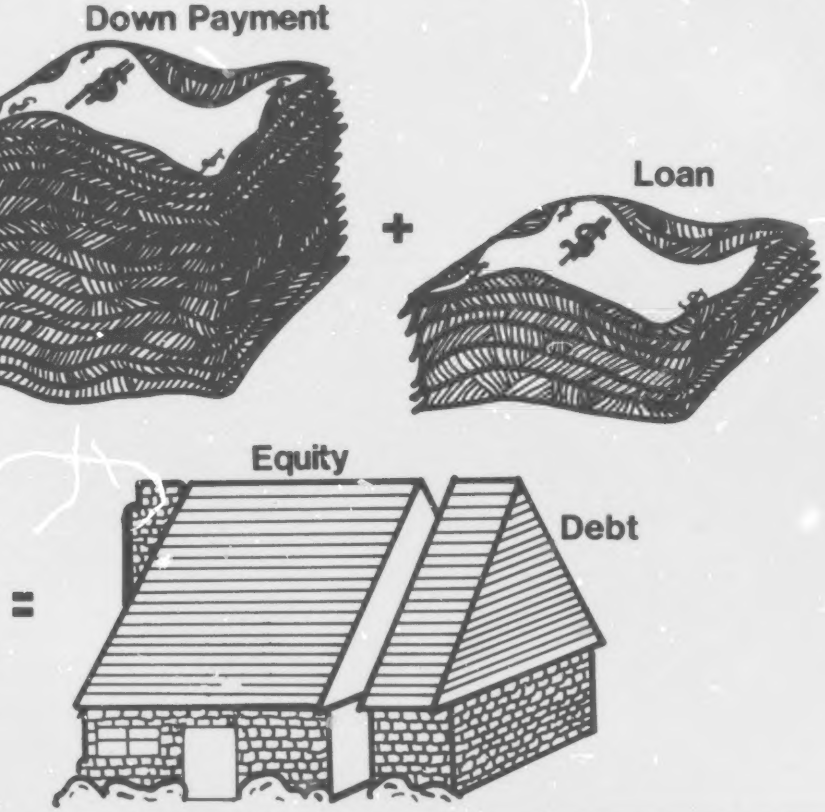
Talents

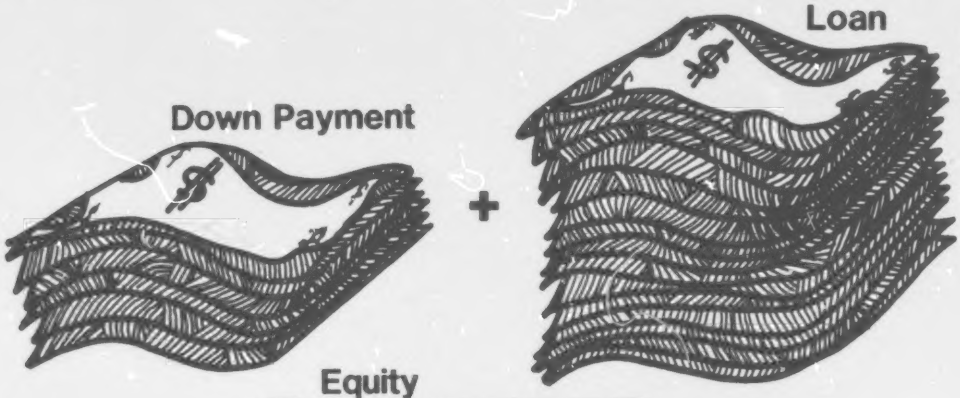
Knowledge



T-67

BUYING A HOUSE


Down Payment
+
Loan
Equity
Debt
=


Loan
Down Payment
+
Equity
Debt
=

THE MORTGAGE SCRAMBLE

DIRECTIONS: Unscramble the following letters to identify a type of mortgage. Write the correct term in the blank of the appropriate definition.

VIOLANNCNOET

OLRL VROE

HAMF

ATERUGDAD PEATYNM

HAF EUIDRSN

LARVEAIB TRAE

AV-TRAEGDEUAN

1. ______________ No down payment is required and the repayment period may be lengthy.

2. ______________ A large down payment is required but repayment period is shorter.

3. ______________ Repayment period may take up to 35 years and a small down payment is required.

4. ______________ Interest rate is adjusted from time to time as the economy fluctuates.

5. ______________ Interest rates are set low at the beginning of repayment period and steadily increase for a few years then level off.

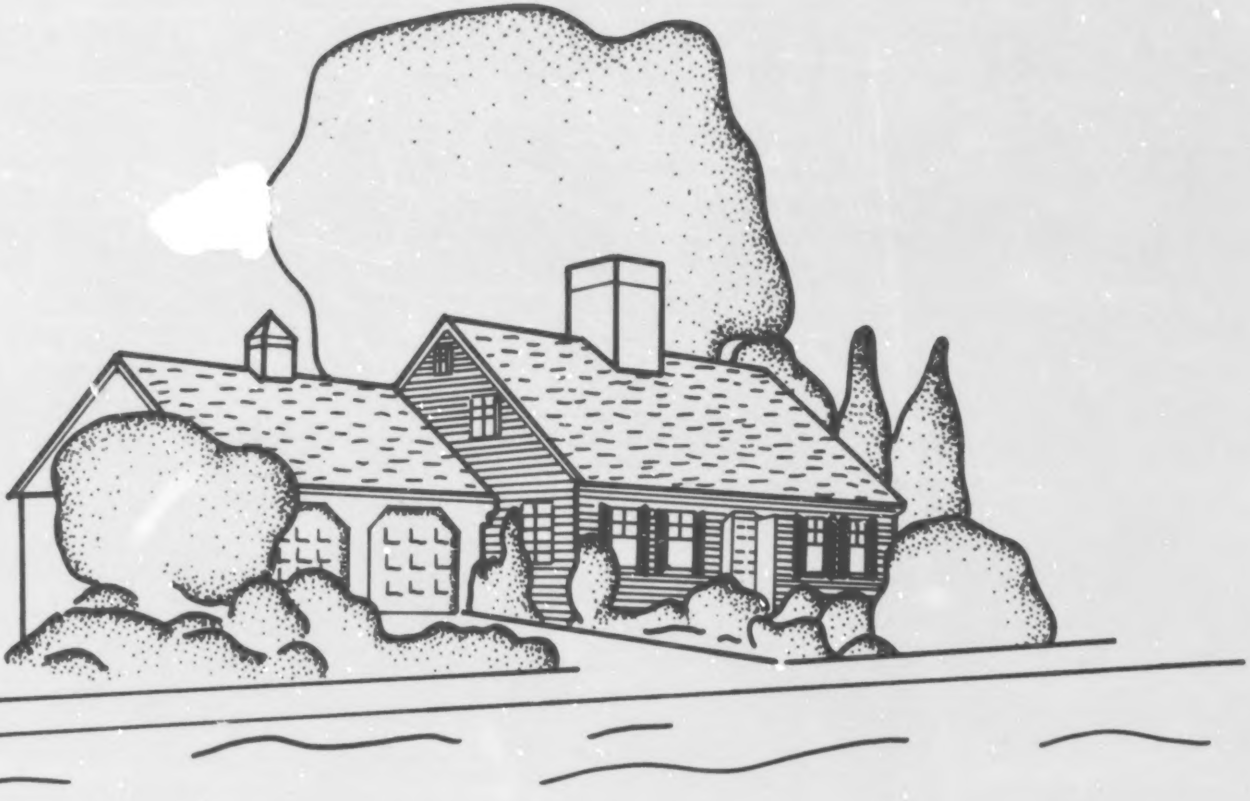
6. ______________ The rate of interest can be renegotiated at regular intervals.

7. ______________ Veterans can qualify for this loan; a down payment may or may not be required.

ARCHITECTURAL STYLES

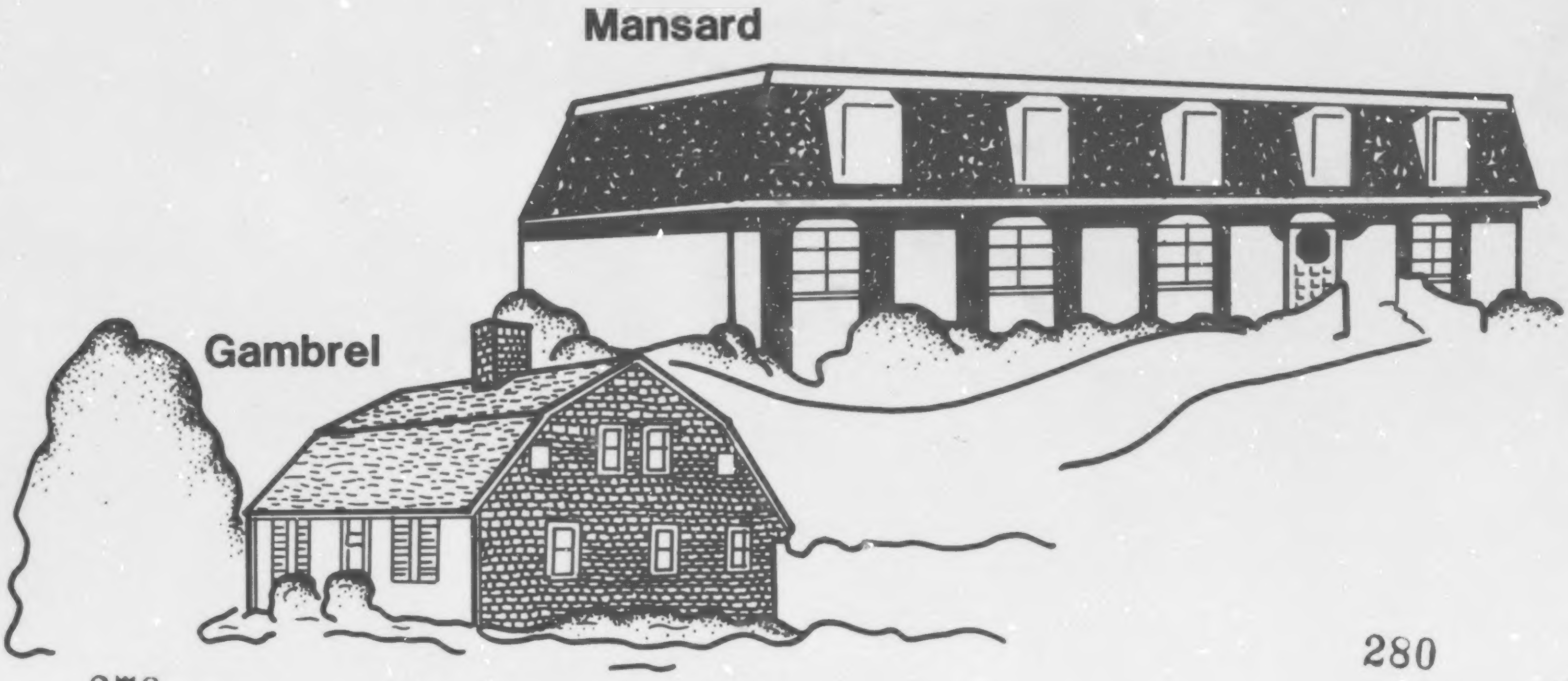
Cape Cod

255



T-69

ARCHITECTURAL STYLES

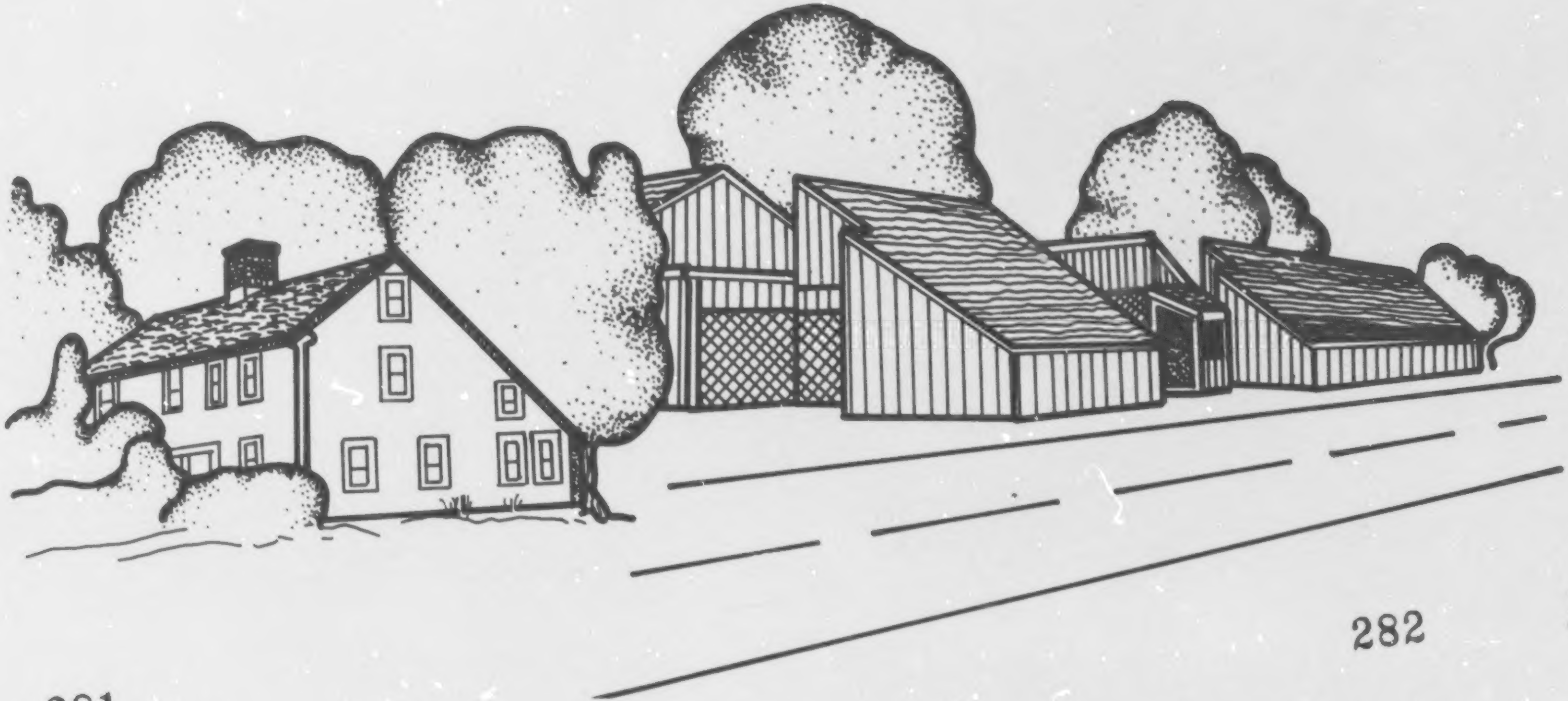

Mansard
Gambrel

279

280

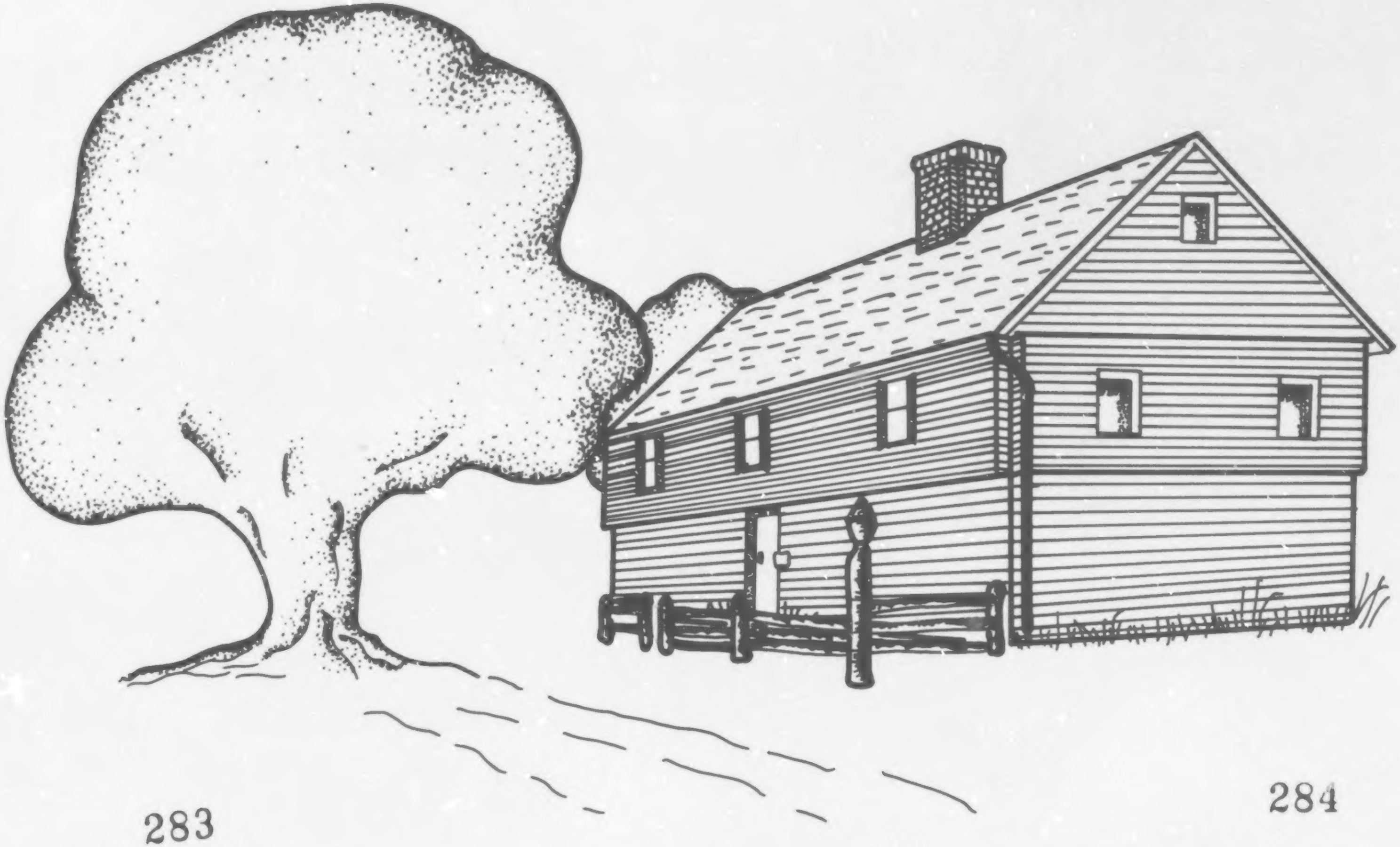
ARCHITECTURAL STYLES

Salt Box



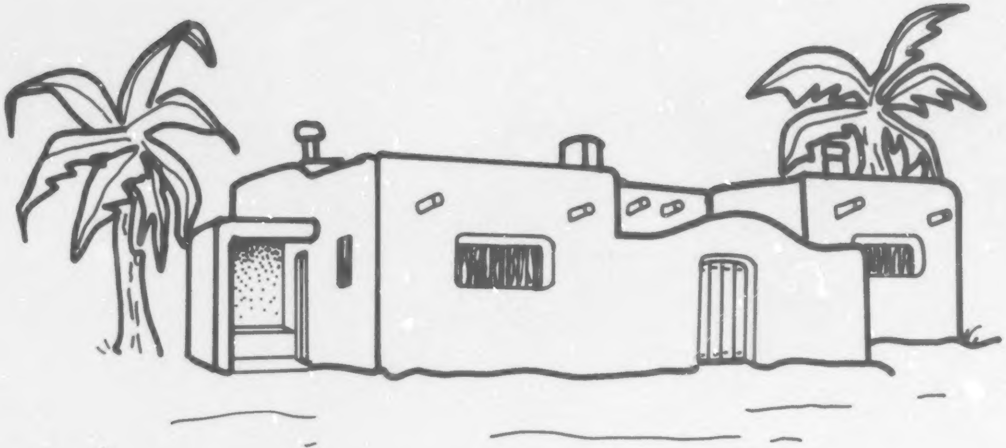
ARCHITECTURAL STYLES

Garrison

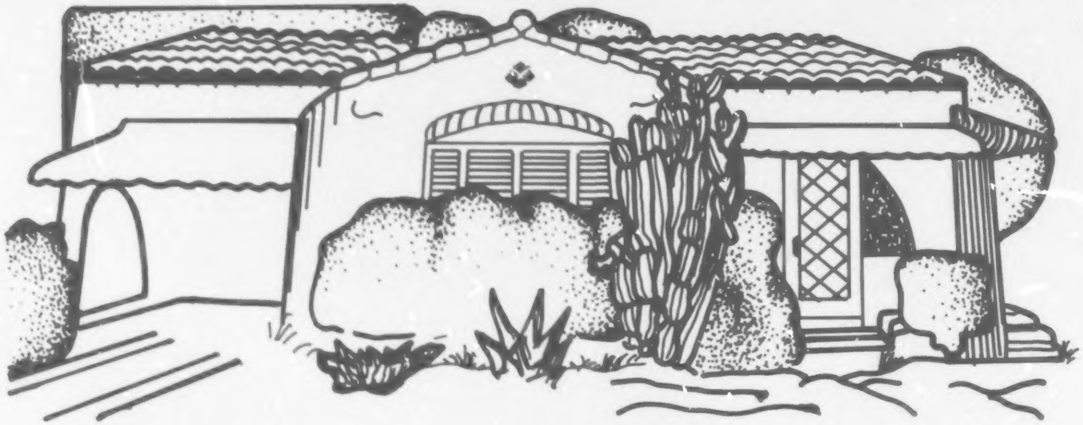


ARCHITECTURAL STYLES

Spanish



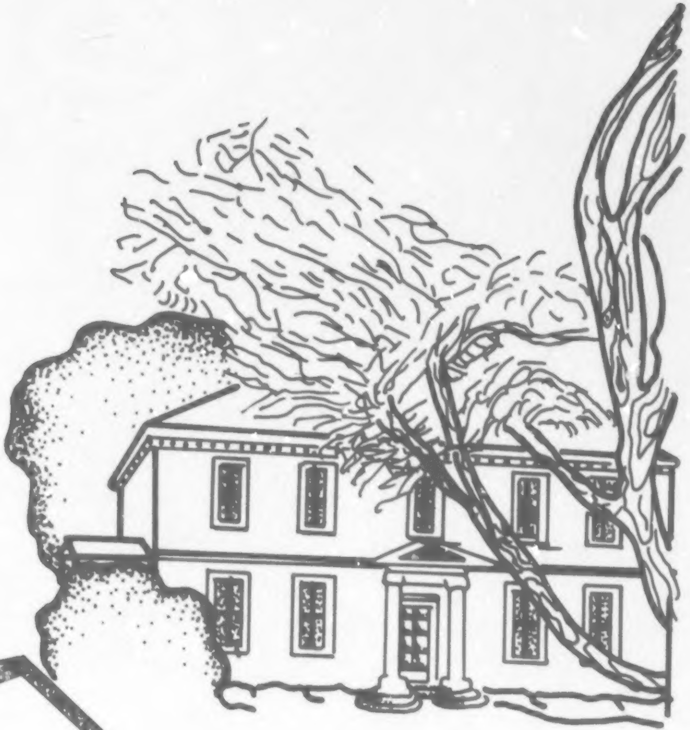
286



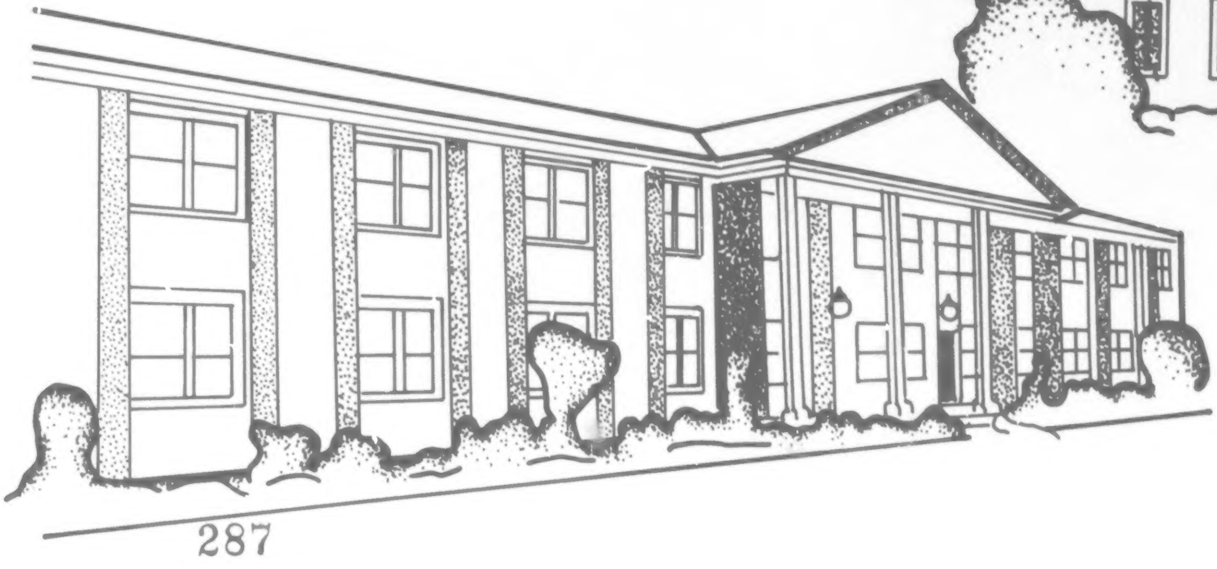
285

ARCHITECTURAL STYLES

Georgian



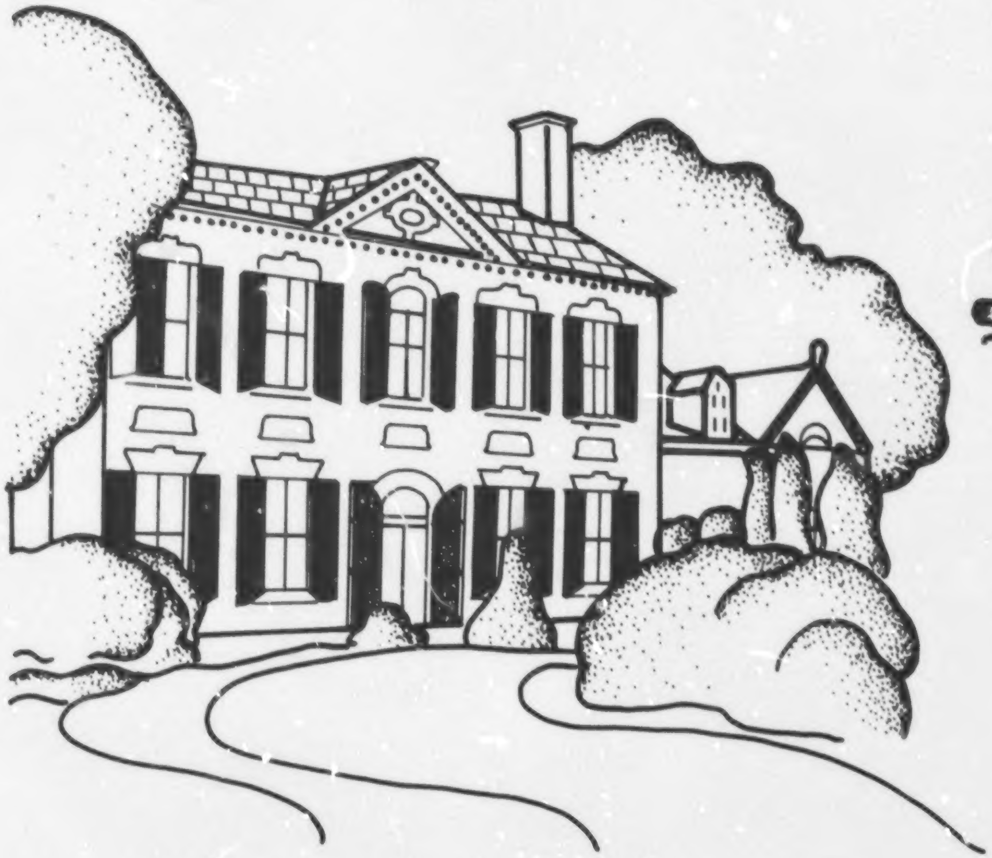
288



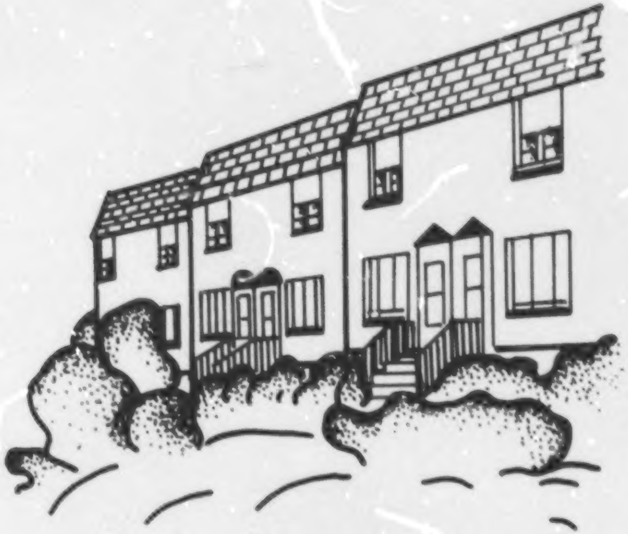
287

ARCHITECTURAL STYLES

Federal



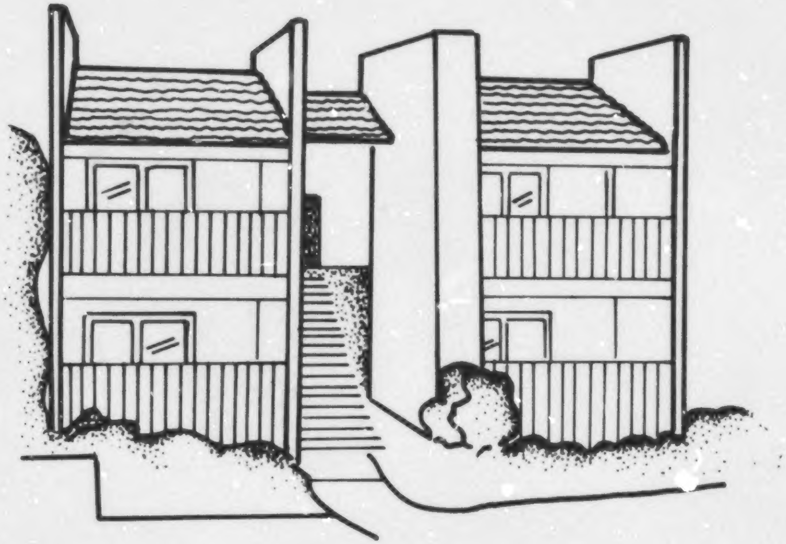
289

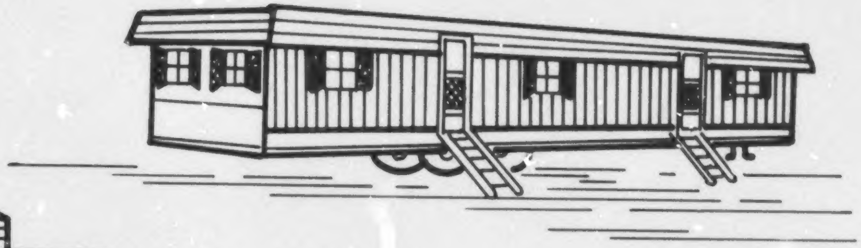


290

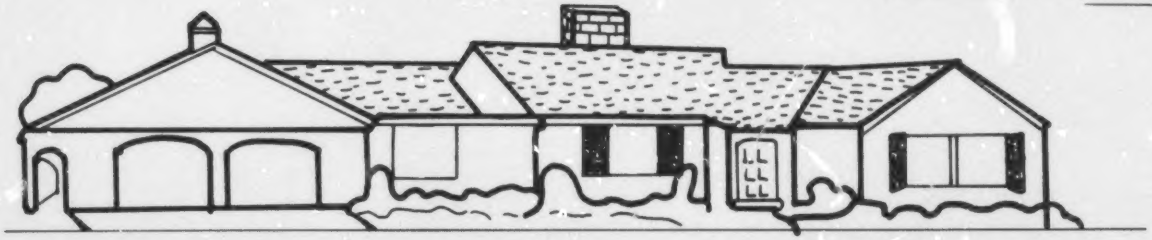
ARCHITECTURAL STYLES

Modern





292



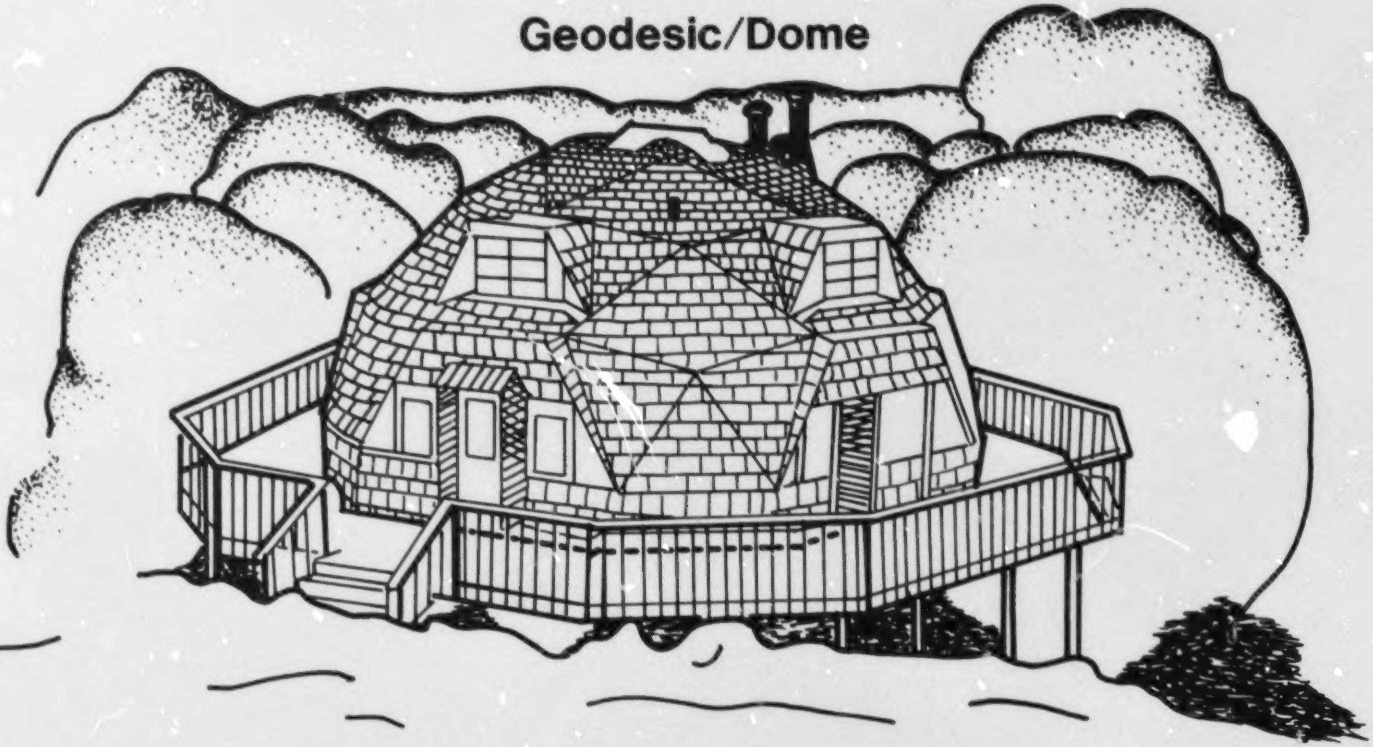
291

T-76

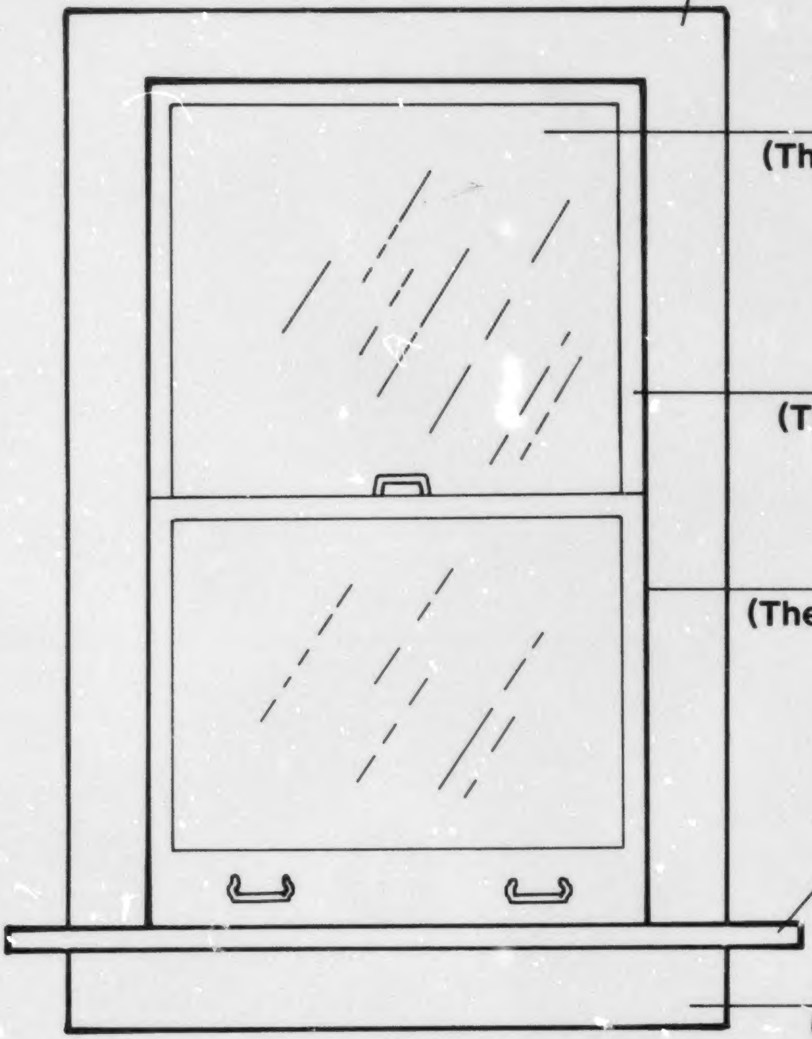
ARCHITECTURAL STYLES

Contemporary

Geodesic/Dome



PARTS OF A WINDOW



FRAME
(The molding that covers the casing and frames the window)

GLASS
(The panes of a window, known as lights)

SASH
(The wood or metal part that holds the glass)

JAMB or CASING
(The depth of the window that fits into the wall)

SILL
(The narrow shelf at the bottom of the sash)

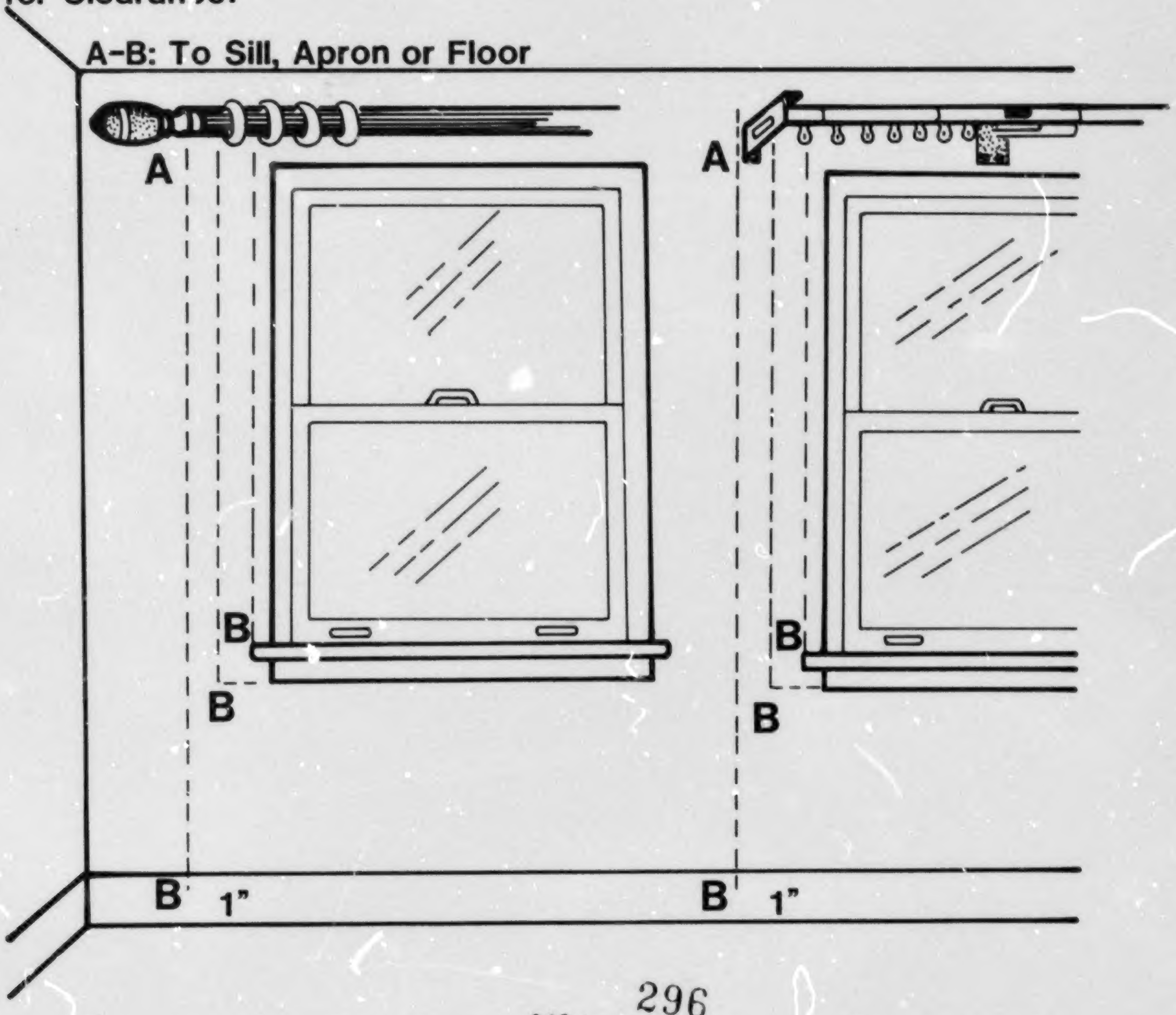
APRON
(The part of the frame below the sill)

BASEBOARD

MEASUREMENTS FOR WINDOW TREATMENTS

Draw Draperies

Measure from Either the Bottom of the Decorative Rings or the Top of the Conventional Rods to the Sill, Apron, or Floor. If Measurement is to the Floor, Subtract 2.5 cm. or 1" for Clearance.


A–B: To Sill, Apron or Floor

MEASUREMENTS FOR WINDOW TREATMENTS

Curtains:

Measurements for Curtains Should be from the Top of the Frame to the Sill, Apron, or Floor.

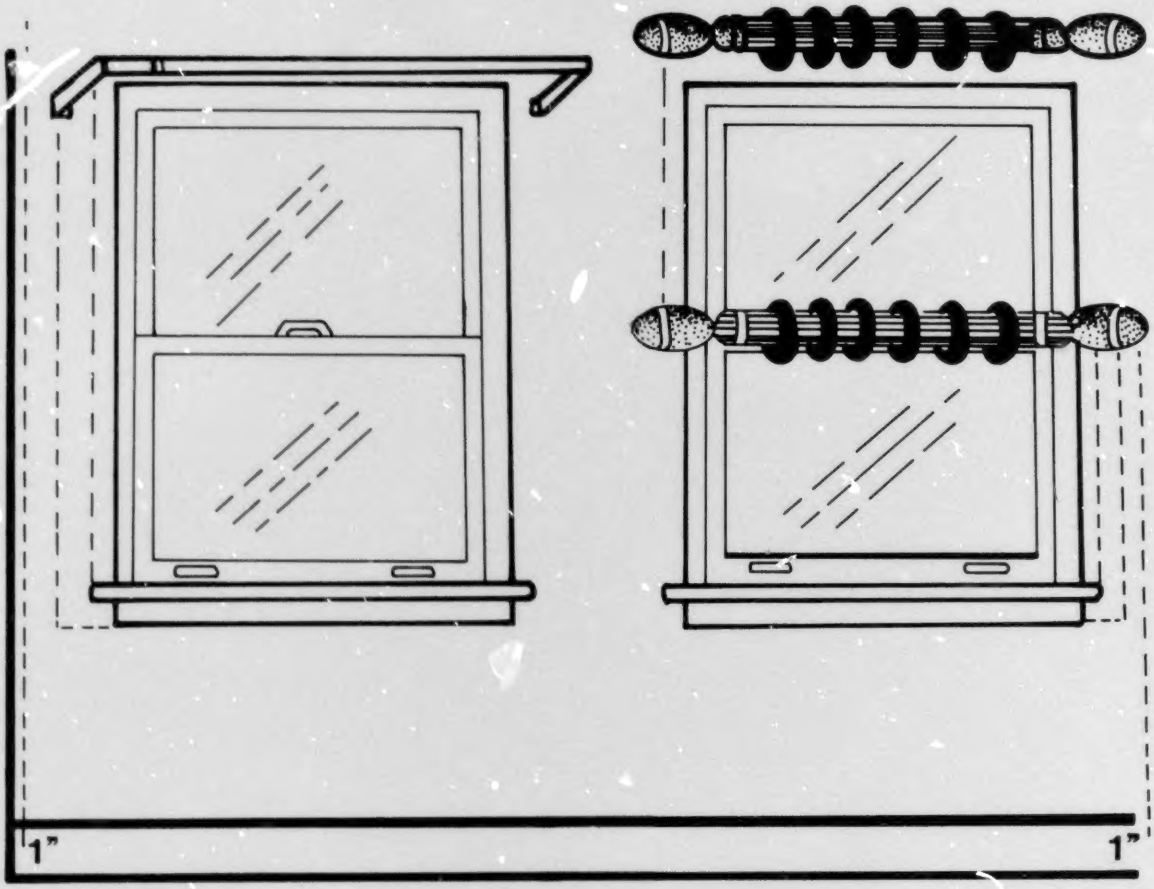
If Measurement is to the Floor, Subtract 2.5 cm. or 1" for Clearance.

Cafes:

TOP TIER: Measure from the Top Rod to the Desired Hem, Usually Covering the Lower Rod.

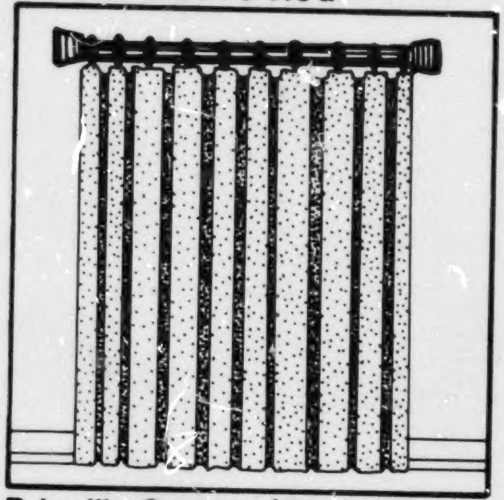
LOWER TIER: Measure from the Lower Rod to the Sill, Apron, or Floor.

If Measurement is to the Floor, Subtract 2.5 cm. or 1" for Clearance.

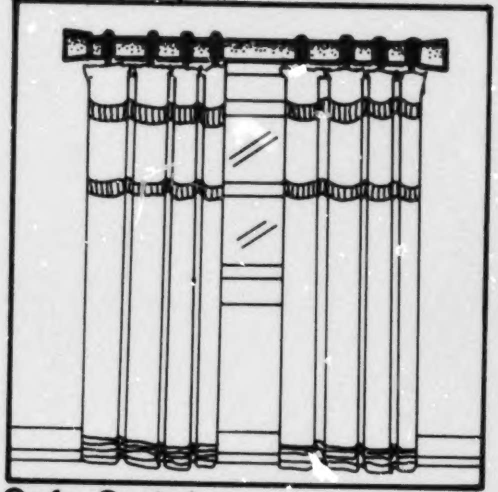


WINDOW TREATMENTS

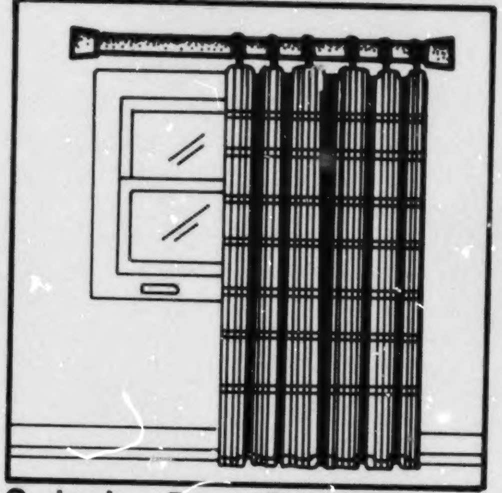
Draw Drapery on Decorative Rod



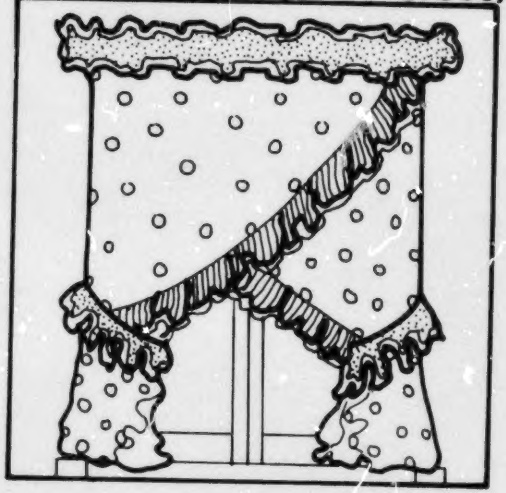
Two-Way Draw Curtain or Drapery



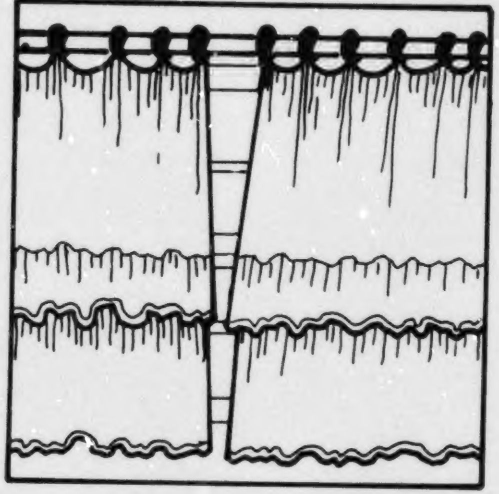
One-Way Draw Curtain or Drapery



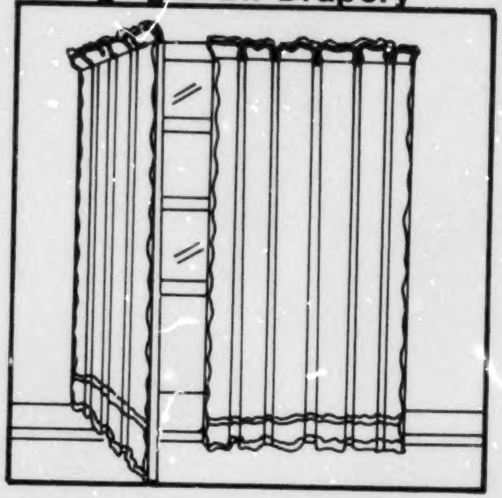
Priscilla Curtain (Criss-Cross)



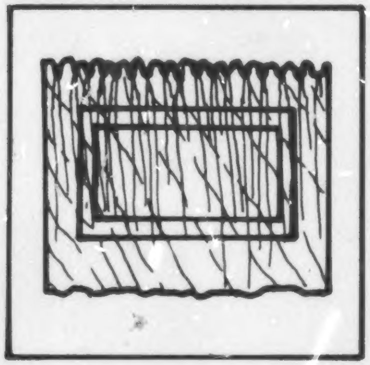
Cafe Curtain

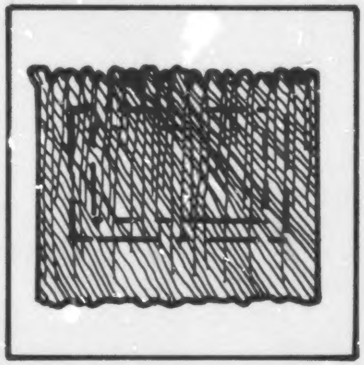


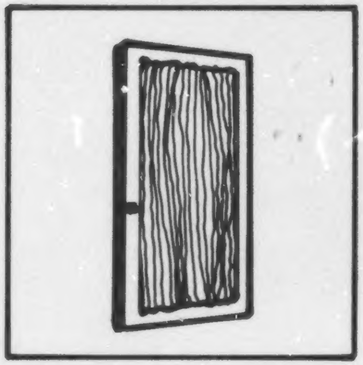
Swinging Draw Drapery

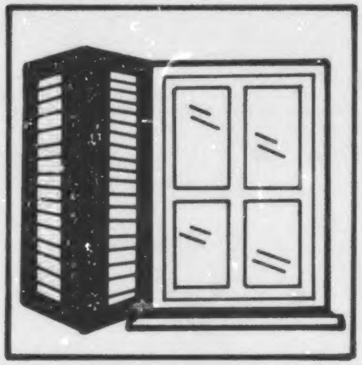


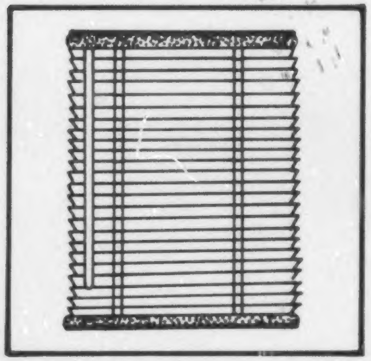
WINDOW TREATMENTS

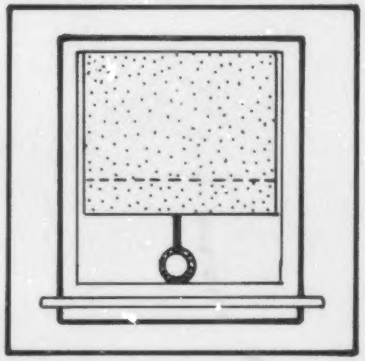

Sheer (Glass Curtain)

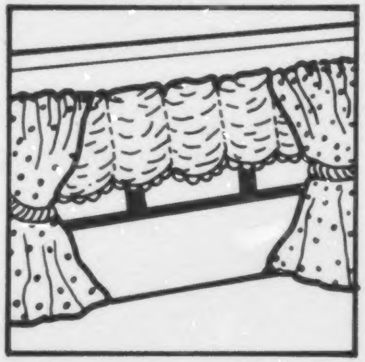

Semi-Sheer

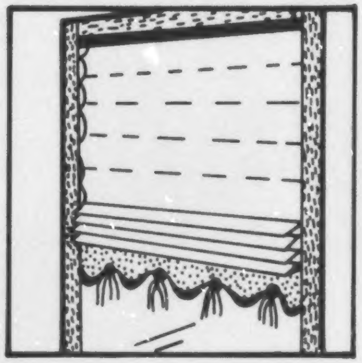

Sash Curtain


Shutter


Venetian Blind

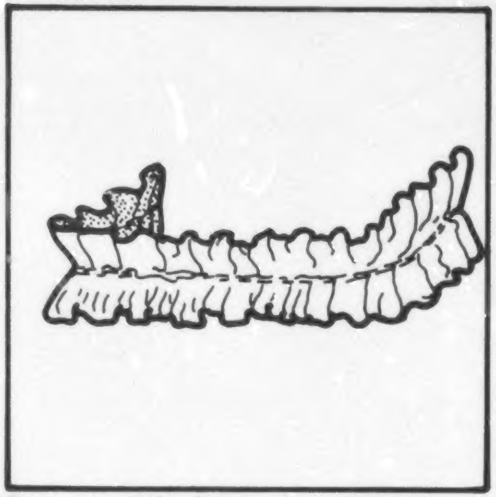

Traditional Shade


Austrian Shade

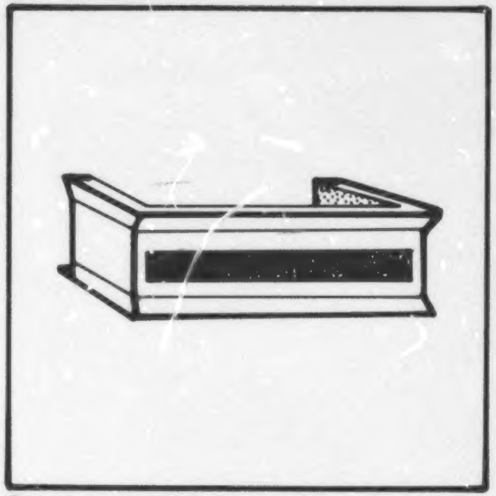

Roman Shade

WINDOW TREATMENTS

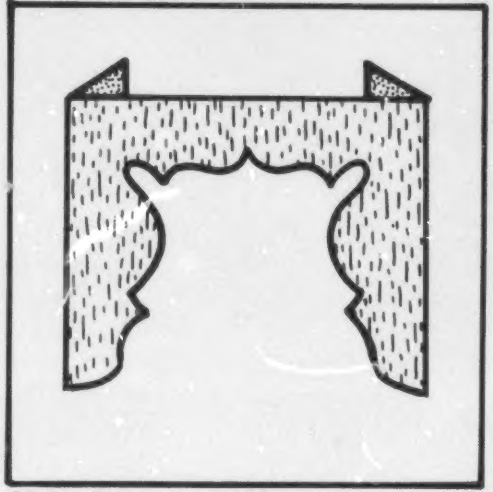
Valance



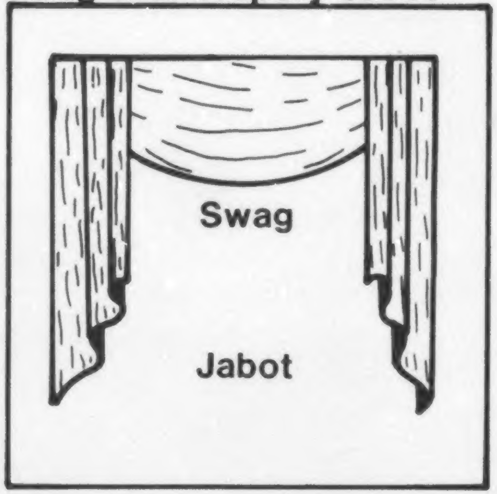
Cornice



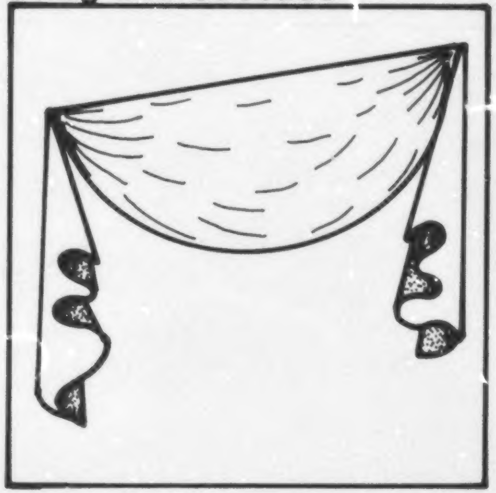
Lambrequin



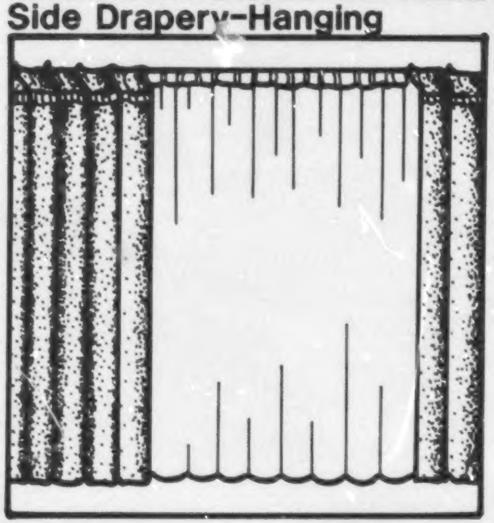
Swag with Drapery Jabot



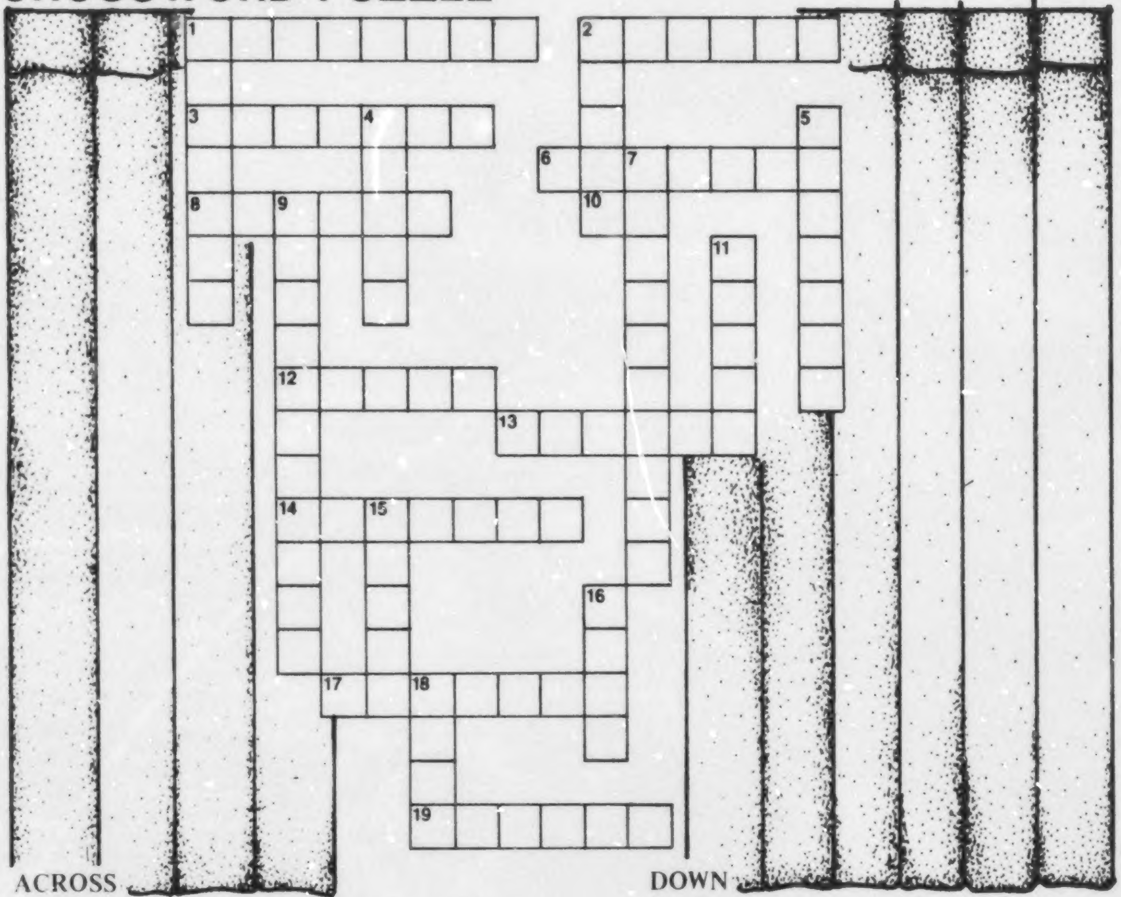
Swag and Cascade



Side Drapery-Hanging



WINDOW TREATMENTS CROSSWORD PUZZLE



ACROSS

1. Fixtures used to attach drapery rods to window frame or wall.
2. Type of valance made by attaching fabric over cotton filling.
3. Draped or pleated fabric extending part way down sides of draperies.
6. Short decorative drapery placed across top of window.
8. The distance from corner of rod extending back to wall.
10. Shirring _ _pe for Austrian shades has cords for gathering the shade and rings for pull cords.
12. Inexpensive way to provide privacy and control light in a room.
13. Window shades that are said to block out light.
14. Straight or shaped window heading made of wood or metal.
17. Brackets, rods, and rollers are supplies needed to________ draperies.
19. Attractive, quick way to make a valance is to shirr or________ them.

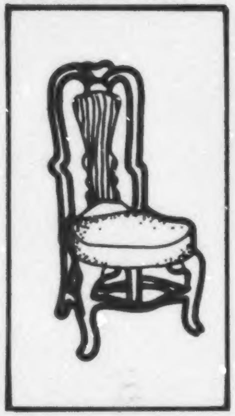
DOWN

1. Coarse canvas used for stiffening lambrequins or valances.
2. A fold in cloth made by doubling material over on itself.
4. Part of the window just under the sill.
5. Window shade mounted so that the shade rolls from the front and hides the roller.
7. Shaped valance with a buckram or plywood backing.
9. Window shade which lets in light but cannot be seen through.
11. Metal or wood border around the window.
15. Fabric shades that can be drawn up in flat folds.
16. Ring, tassel, or other handle used to raise or lower a shade.
18. Fabric draped loosely across top of window.

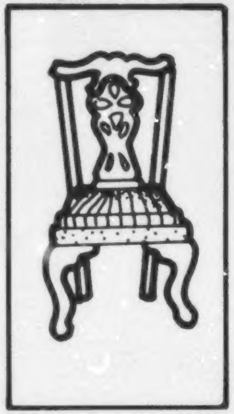
FURNITURE STYLES

Traditional

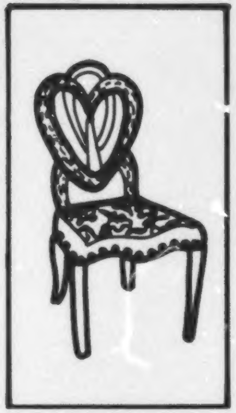
Queen Ann



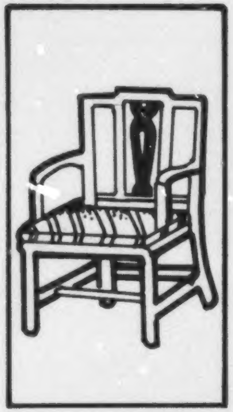
Chippendale



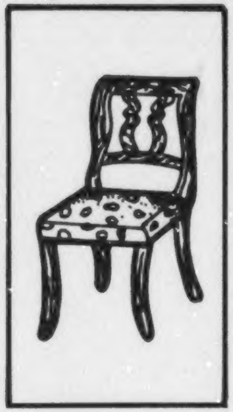
Hepplewhite



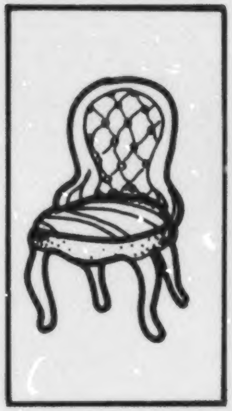
Sheraton



Duncan Phyfe

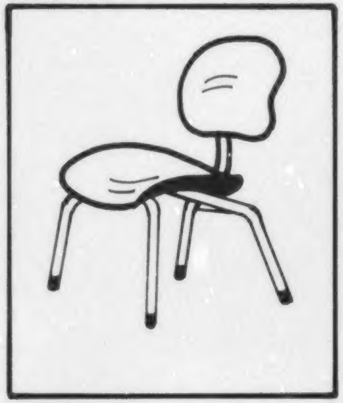


Victorian

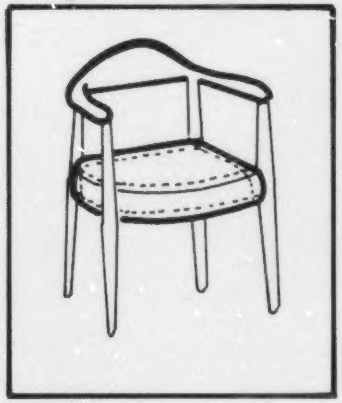


Contemporary

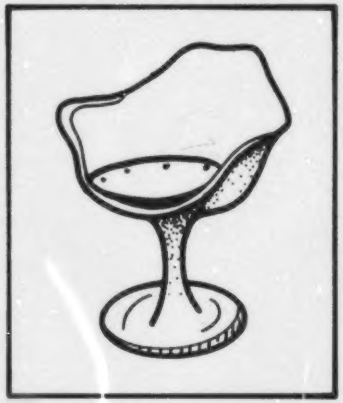
Eames



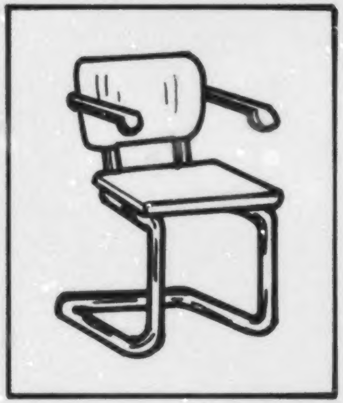
Wegner



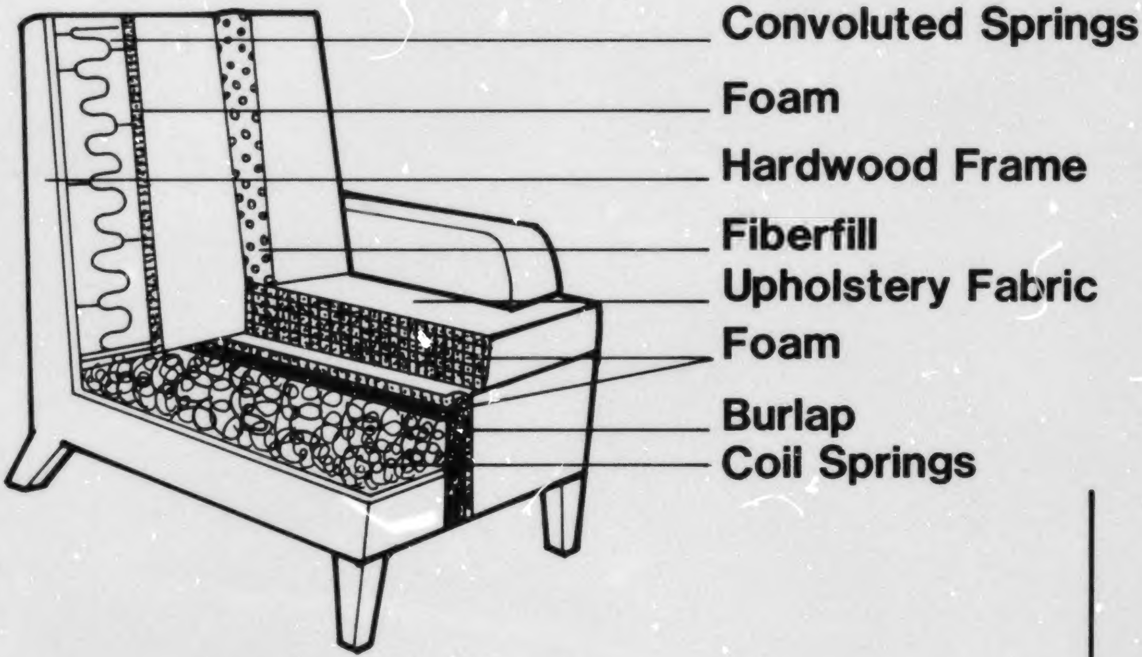
Saarinen



Breuer



CONSTRUCTION OF AN UPHOLSTERED CHAIR


Convoluted Springs
Foam
Hardwood Frame
Fiberfill
Upholstery Fabric
Foam
Burlap
Coil Springs

T-87

FIGURING SIZE AND ENERGY EFFICIENT RATIO FOR AIR CONDITIONERS*

FORMULA FOR FIGURING AIR CONDITIONER SIZE:

$$\frac{W \times H \times I \times L \times E}{60} = \text{Btu's needed in air conditioner's capacity}$$

W idth of the room (in feet)
H eight of the room (in feet)
I nsulation–use 10 if room is well insulated, 18 if it isn't or if it has a lot of windows
L ength of the room (in feet)
E xposure–the direction faced by the longest outside wall. If north, use 16; east, use 17; south, use 18; and west 20.

FORMULA FOR FINDING THE ENERGY EFFICIENT RATIO:

$$\frac{\text{Btu's}}{\text{Wattage}} = \text{EER (Energy Efficiency Ratio)}$$

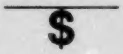
EER numbers range within 5 to 12, with 5 poor and 12 outstanding.

---

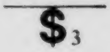
*Kleeberg, Irene Cumming. *The Home Energy Saver.* New York: Butterick Publishing, 1977, pp. 85-87.

ELECTRICAL SYMBOLS USED ON BLUEPRINTS

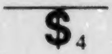
Switch



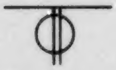
Three-Way Switch



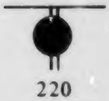
Four-Way Switch



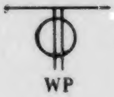
115 V. Duplex Outlet



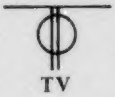
220 V. Duplex Outlet



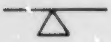
Weatherproof Outlet



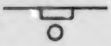
Television Outlet



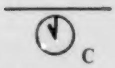
Telephone



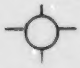
Door Bell



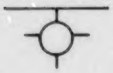
Clock



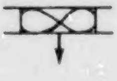
Ceiling Light



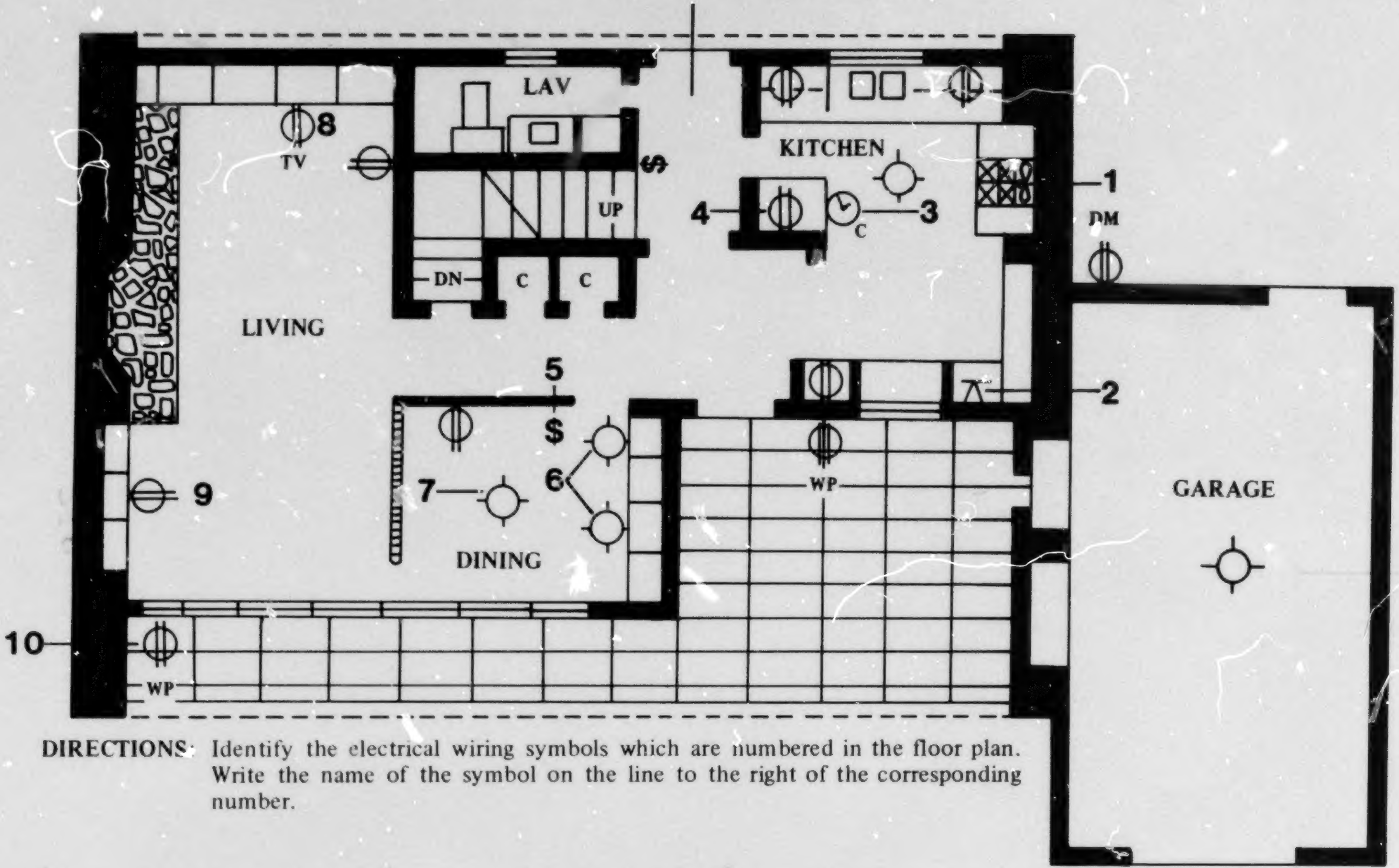
Wall Light or Sconce



Exhaust Fan



IDENTIFY ELECTRICAL WIRING SYMBOLS


LAV
KITCHEN
LIVING
DINING
GARAGE
UP
DN
C
C
TV
8
$
4
3
C
1
DM
2
5
$
6
7
9
WP
10
WP

DIRECTIONS: Identify the electrical wiring symbols which are numbered in the floor plan. Write the name of the symbol on the line to the right of the corresponding number.

1. ____________________

2. ____________________

3. ____________________

4. ____________________

5. ____________________

6. ____________________

7. ____________________

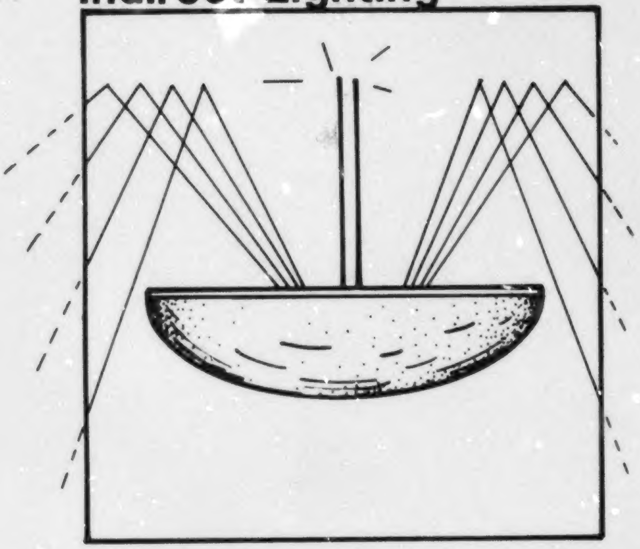
8. ____________________

9. ____________________

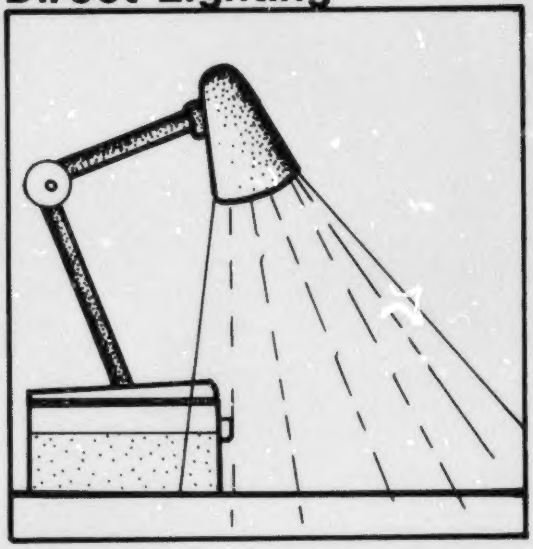
10. ____________________

TYPES OF LIGHTING

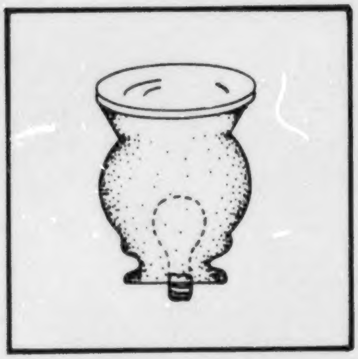
Indirect Lighting

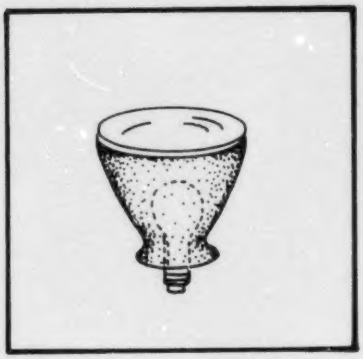


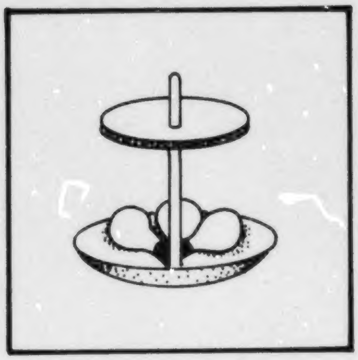
Direct Lighting



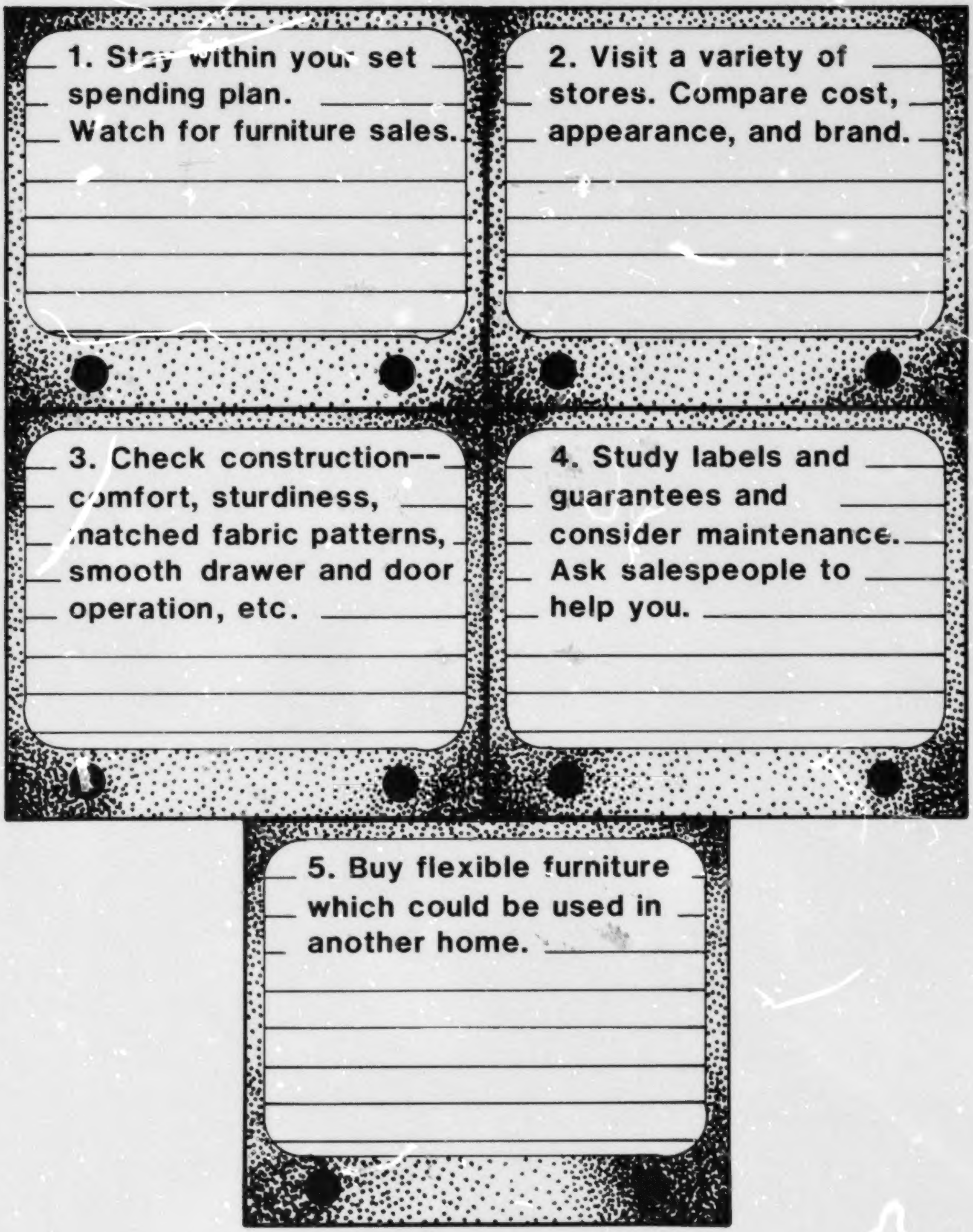
TYPES OF DIFFUSERS







BUYING GUIDELINES



1. Stay within your set spending plan. Watch for furniture sales.

2. Visit a variety of stores. Compare cost, appearance, and brand.

3. Check construction--comfort, sturdiness, matched fabric patterns, smooth drawer and door operation, etc.

4. Study labels and guarantees and consider maintenance. Ask salespeople to help you.

5. Buy flexible furniture which could be used in another home.

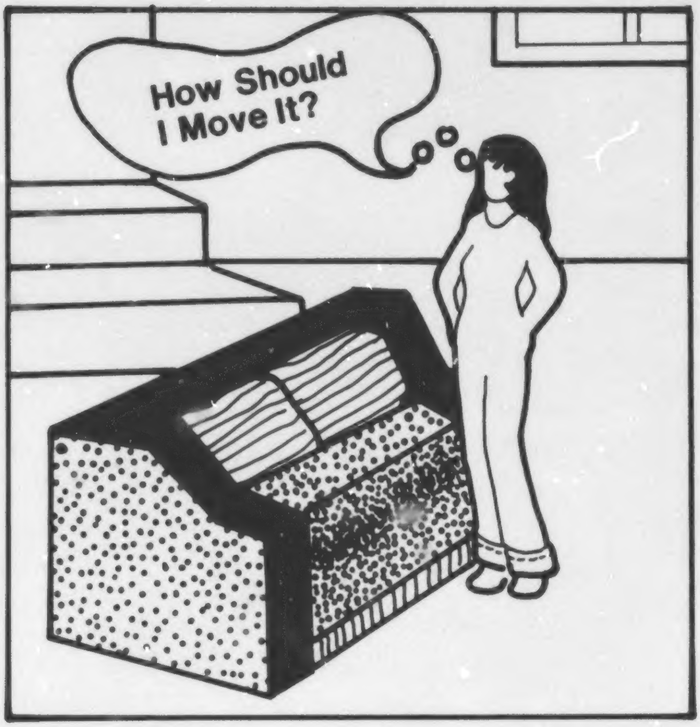
PHYSICAL CONDITIONS IN HOUSING SEEK-N-FIND

DIRECTIONS: Complete the physical conditions seek-and-find by circling the hidden words to identify the physical conditions in housing which affect the well-being of family members. Refer to words listed below.

D	E	A	S	I	R	E	N	E	N	P	T
E	D	N	O	L	I	N	I	N	T	N	N
I	O	N	L	E	T	D	G	I	E	L	O
N	G	I	O	A	A	L	H	M	M	T	I
G	I	N	O	X	E	S	E	S	P	S	T
R	N	O	I	S	E	V	L	E	E	R	A
N	O	T	E	T	O	D	O	R	R	O	L
A	P	A	O	M	H	O	I	E	A	M	I
E	T	X	R	O	I	G	M	A	T	U	T
U	O	I	Y	T	I	D	I	M	U	H	N
R	A	D	I	O	L	O	T	L	R	O	E
T	A	X	O	O	I	G	E	S	E	I	V

WORDS:
- air movement
- humidity
- lighting
- noise
- odor
- temperature
- ventilation

DECISION - MAKING PROCESS


How Should I Move It?

- Define the Problem
- Determine Possible Alternatives
- Analyze Each Alternative
- Choose an Alternative
- Carry Out the Decision
- Evaluate Results of the Decision

TYPES OF STORAGE UNITS

Freestanding

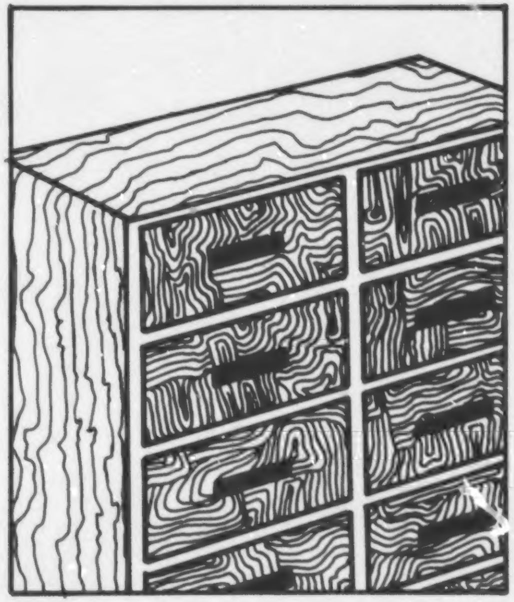
- Bookcases
- Buffets
- Chest of drawers
- Display cabinets
- Filing cabinets
- Wardrobe closets

Portable

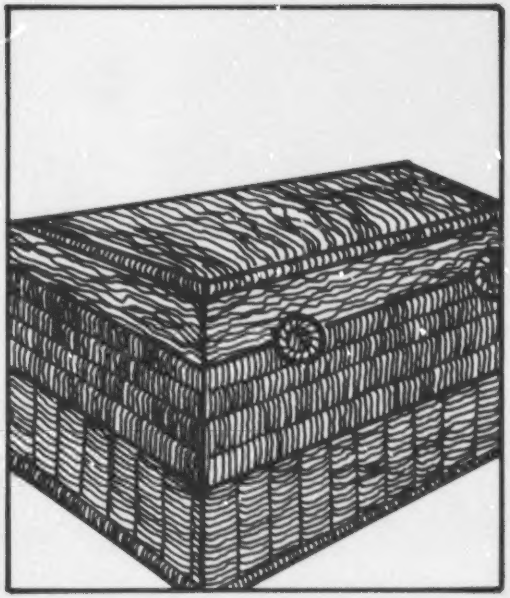
- Baskets and bags
- Boxes
- Hampers
- Small filing cabinets
- Trunks
- Wall racks

Modular or Wall Units

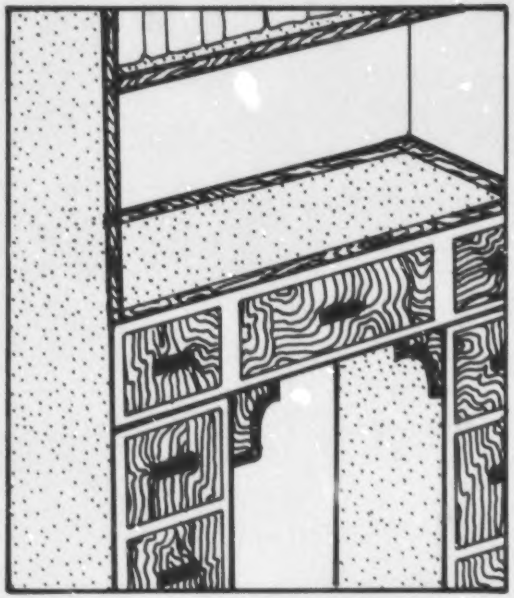
- Desks
- Entertainment centers
- Open upper shelves
- Pull-out typewriter and sewing tables
- Upper bookcases
- Vanity tables



CHEST OR DRAWER



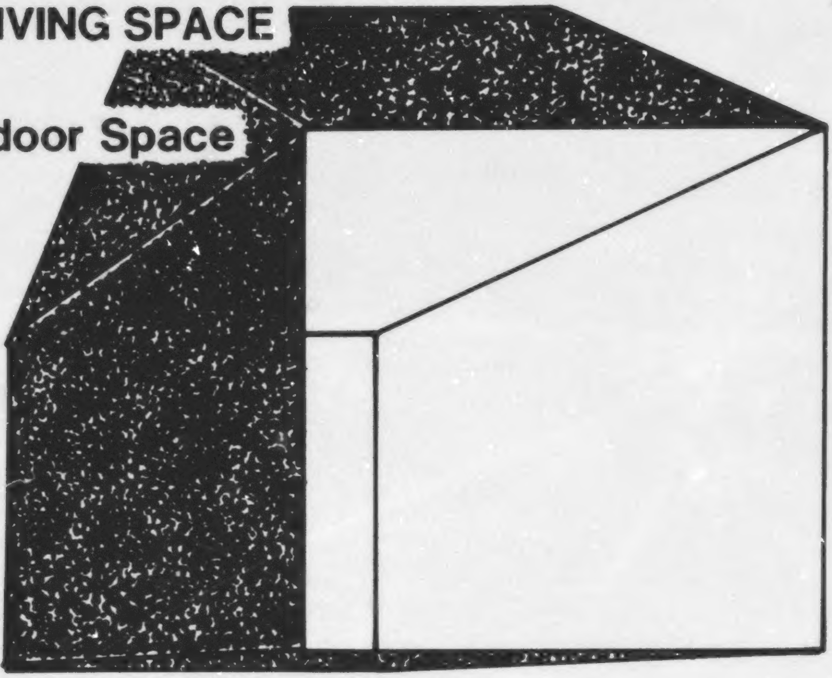
WICKER TRUNK



DESK

T-95

EXPANDING LIVING SPACE



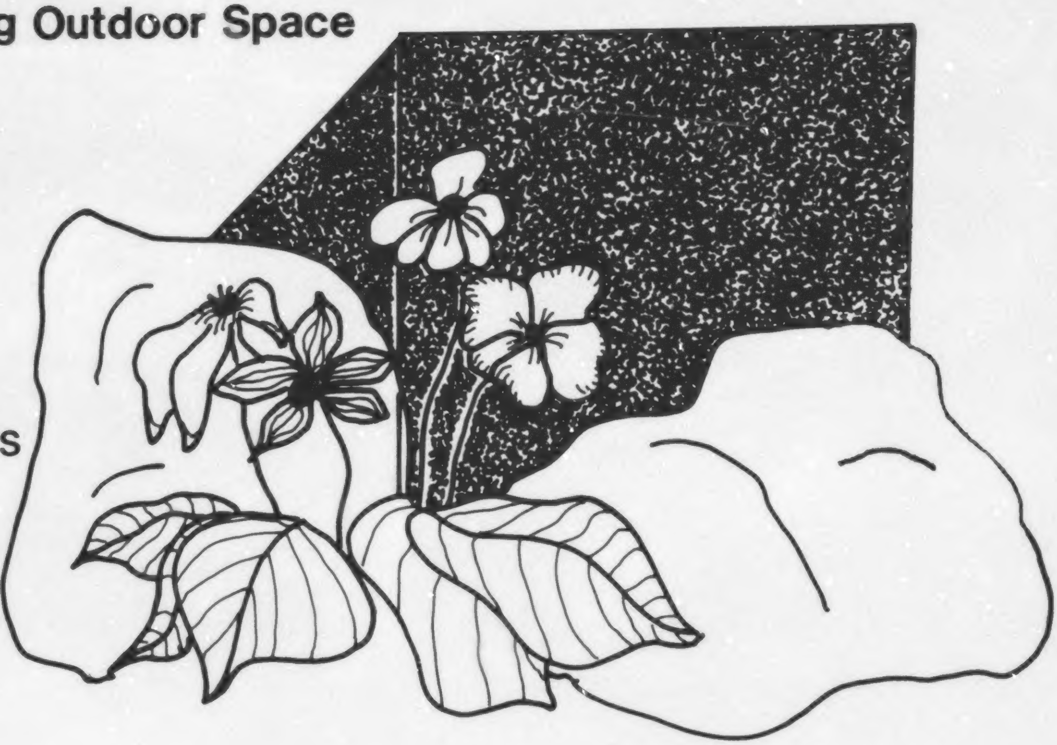
Converting Indoor Space

ATTICS

BASEMENTS

GARAGES

Converting Outdoor Space



PORCHES

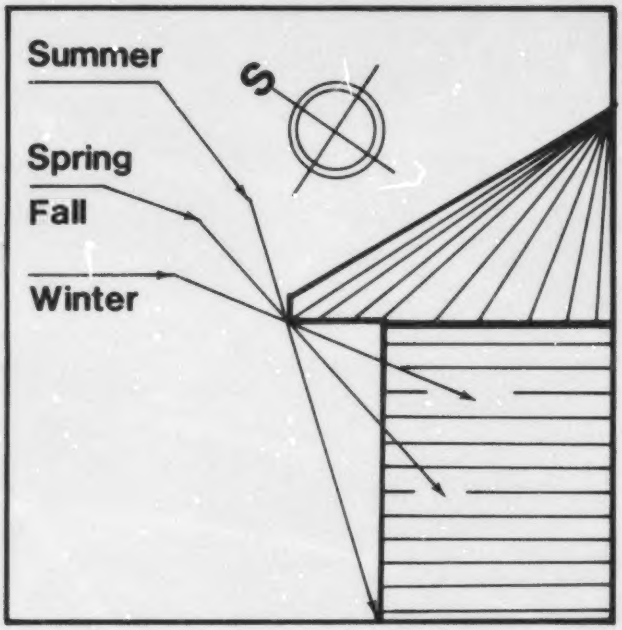
PATIOS

TERRACES

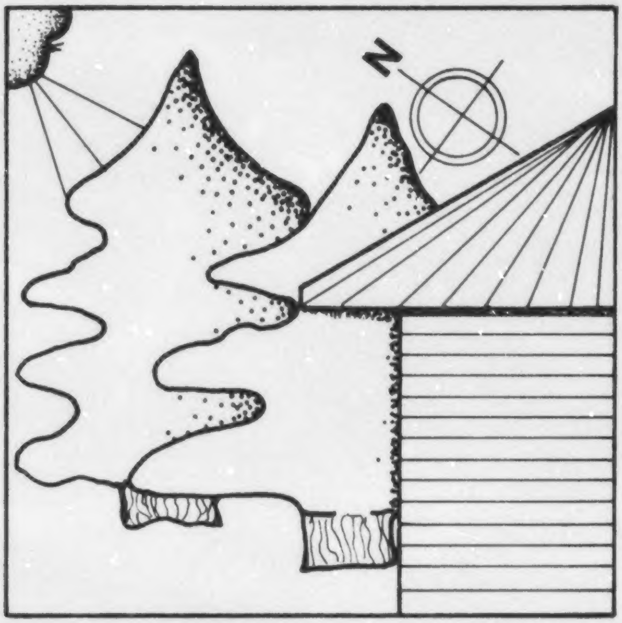
DECKS

BREEZEWAYS

ORIENTATION OF HOME TO ITS SITE

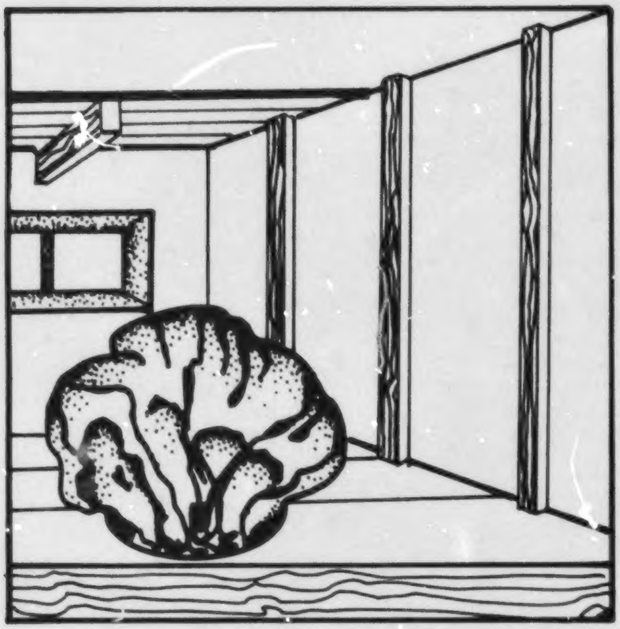

Summer
S
Spring
Fall
Winter

Trees or overhang on south and west sides take advantage of the sun

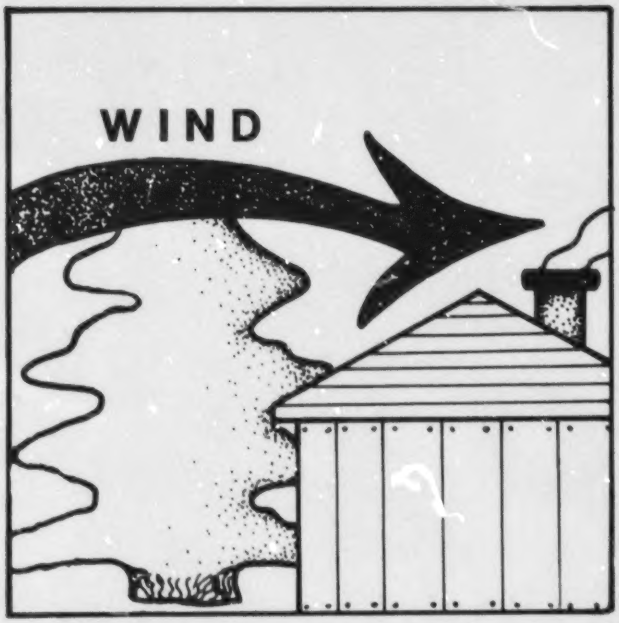


Dense tree growth on north and northwest sides protects from cold winds

ORIENTATION OF HOME TO ITS SITE (CONT.)



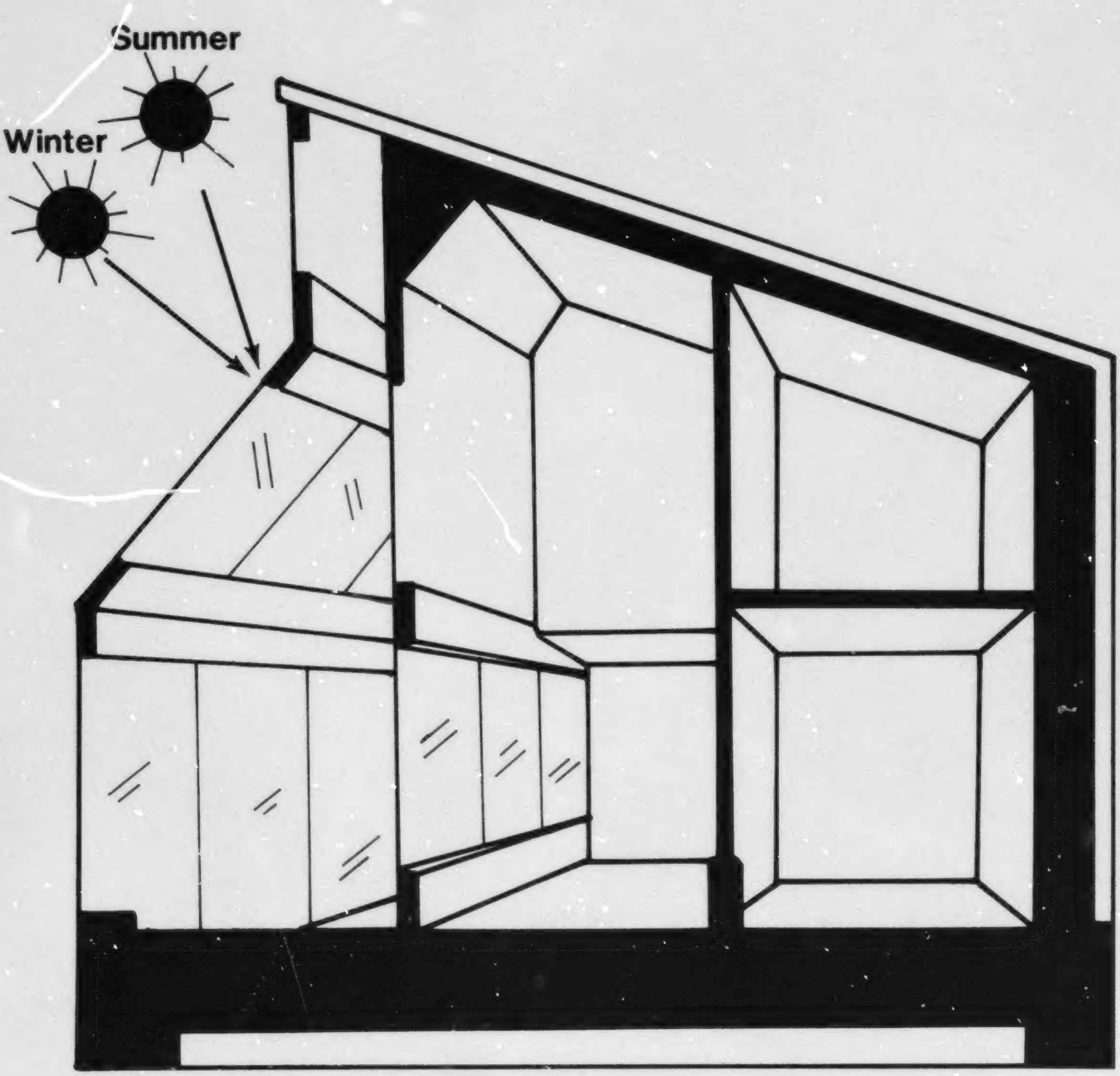
Wind breaks provide privacy and protection from sun and breezes



Wind breaks reduce infiltration losses

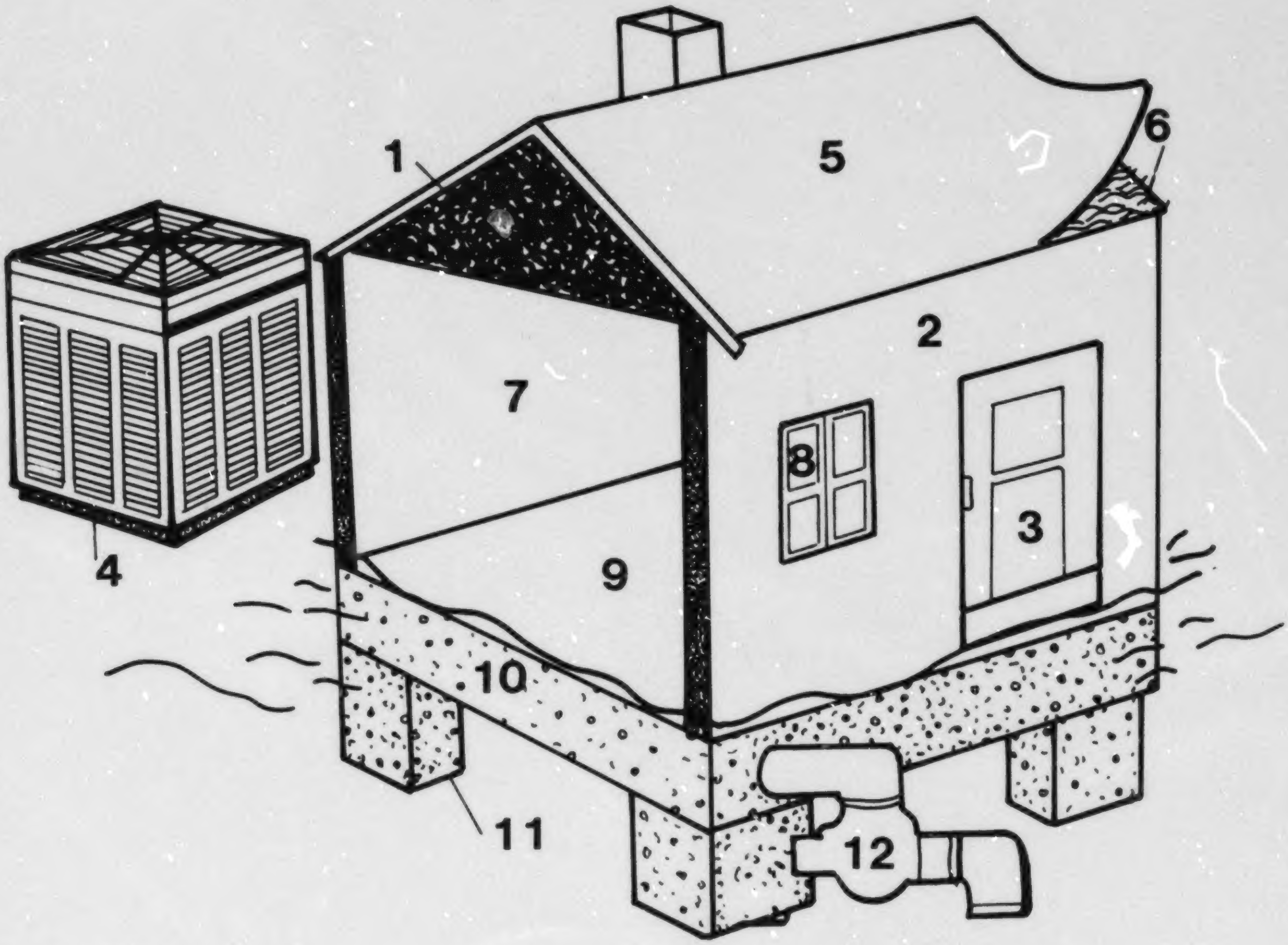
ORIENTATION OF HOME TO ITS SITE (CONT).

Rooms located to the sun allow for the use of a passive solar system


Summer
Winter

CONSTRUCTION FEATURES OF A HOUSE

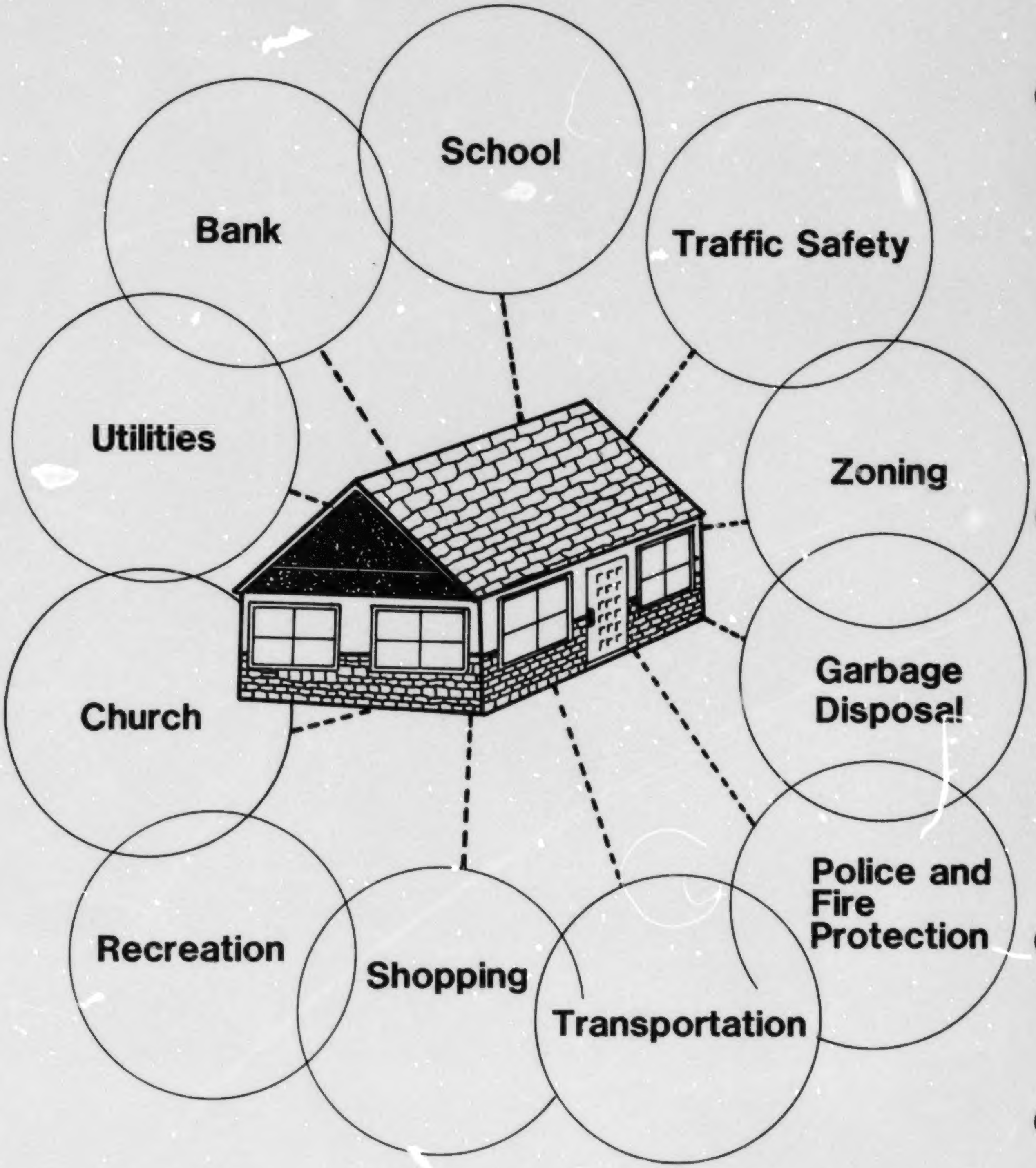
DIRECTIONS: Identify the construction features which are numbered in the illustration. Write the name of the construction feature in the blank to the right of the corresponding number below.



ANSWERS:

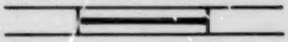
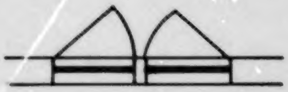
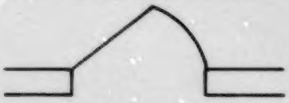
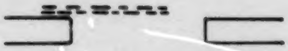
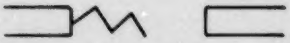
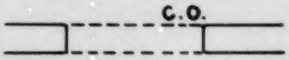
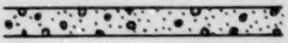
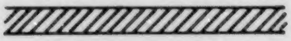
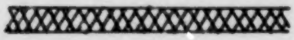
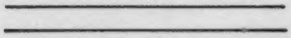
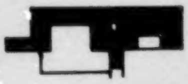
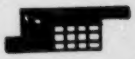
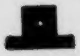
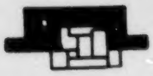
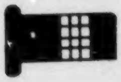
1. ______________________
2. ______________________
3. ______________________
4. ______________________
5. ______________________
6. ______________________
7. ______________________
8. ______________________
9. ______________________
10. ______________________
11. ______________________
12. ______________________

FACTORS AFFECTING LOCATION OF THE HOME

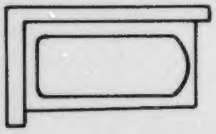
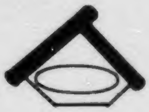
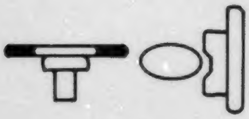
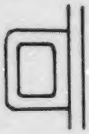
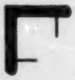
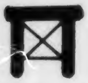
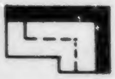
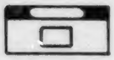
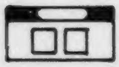
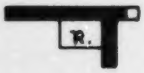
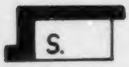

School
Bank
Traffic Safety
Utilities
Zoning
Garbage Disposal
Church
Police and Fire Protection
Recreation
Shopping
Transportation

ARCHITECTURAL AND PLUMBING SYMBOLS USED ON BLUEPRINTS

Architectural

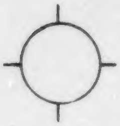
Window	
Casement Window	
Door	
Sliding Door	
Folding Door	
Cased Opening	
Concrete	
Brick	
Concrete Block	
Wood	
Fireplaces	
Fireplace Barbeque	
Corner	
Chimney	
Fireplace and Flue	
Two-Way Fireplace	

Plumbing

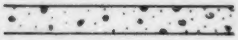
Bath Tubs	
Regular Tub	
Corner Tub	
Toilet or Water Closet	
Lavatory	
Showers	
Corner Shower	
Built-In Shower	
Hanging Cabinet	
Sinks	
Single Sink	
Double Sink	
Refrigerator	
Stove	

FLOOR PLAN SYMBOLS

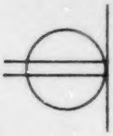
DIRECTIONS: Identify the following symbols found on floor plans. Write the name of the symbol on the line under the symbol.



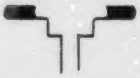
1. ____________



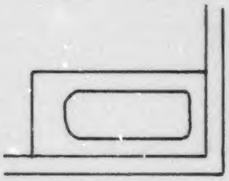
2. ____________



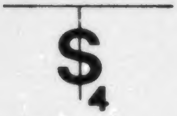
3. ____________



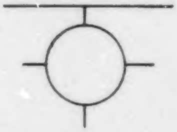
4. ____________



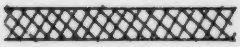
5. ____________



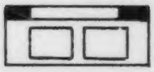
6. ____________



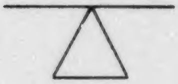
7. ____________



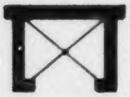
8. ____________



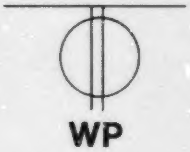
9. ____________



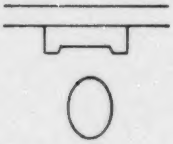
10. ____________



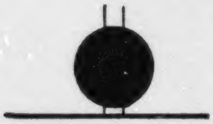
11. ____________



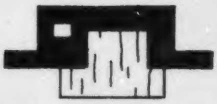
12. ____________



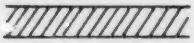
13. ____________



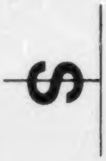
14. ____________



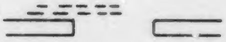
15. ____________



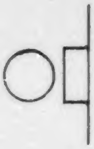
16. ____________



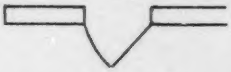
17. ____________



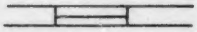
18. ____________



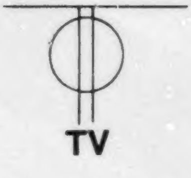
19. ____________



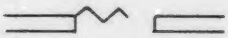
20. ____________



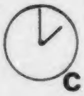
21. ____________



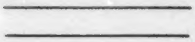
22. ____________



23. ____________

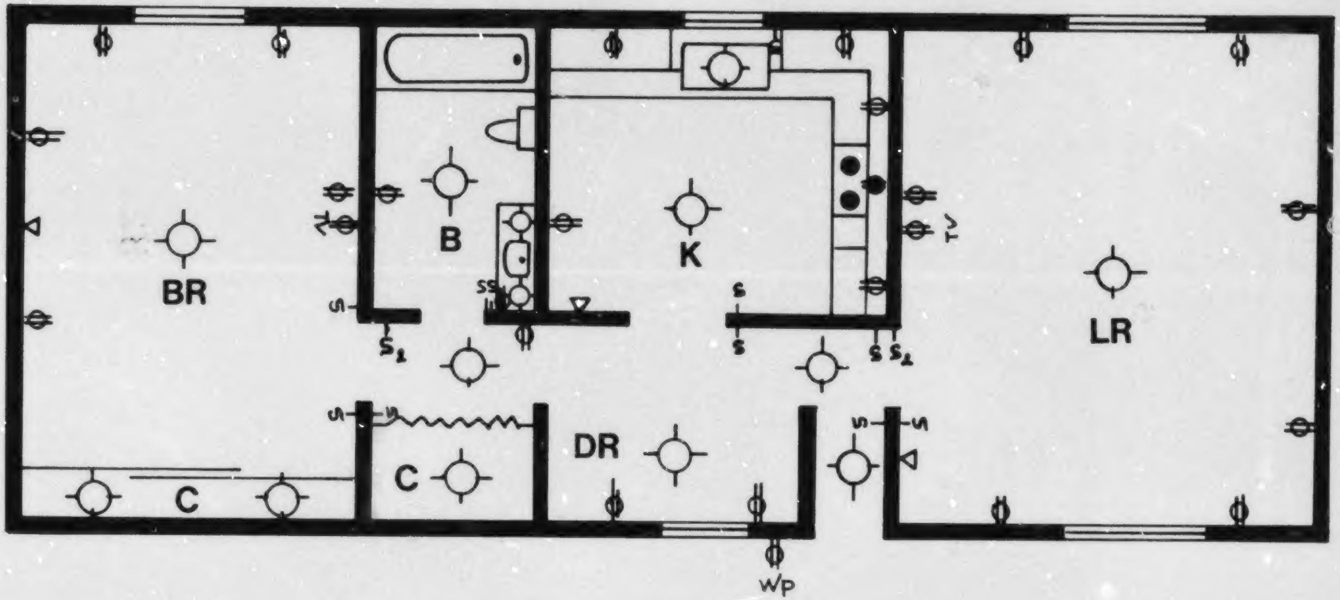


24. ____________



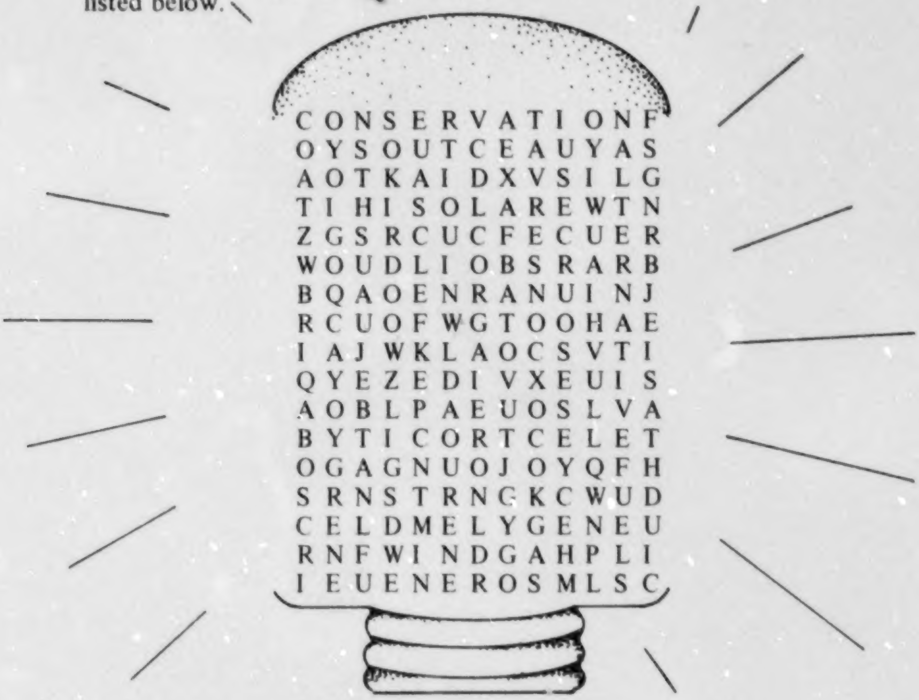
25. ____________

WORK DRAWING OF AN APARTMENT


BR
B
K
LR
DR
C
C
TV
TV
WP
S
S_2
SS

ENERGY AND CONSERVATION SEEK-N-FIND

DIRECTIONS: Complete the energy and conservation seek-and-find by circling the hidden words to identify various energy sources available to consumers today. Refer to words listed below.



C O N S E R V A T I O N F
O Y S O U T C E A U Y A S
A O T K A I D X V S I L G
T I H I S O L A R E W T N
Z G S R C U C F E C U E R
W O U D L I O B S R A R B
B Q A O E N R A N U I N J
R C U O F W G T O O H A E
I A J W K L A O C S V T I
Q Y E Z E D I V X E U I S
A O B L P A E U O S L V A
B Y T I C O R T C E L E T
O G A G N U O J O Y Q F H
S R N S T R N C K C W U D
C E L D M E L Y G E N E U
R N F W I N D G A H P L I
I E U E N E R O S M L S C

WORDS:

alternate fuels
coal
conservation
electricity
energy
gas
nuclear
oil
solar
sources
wind
wood

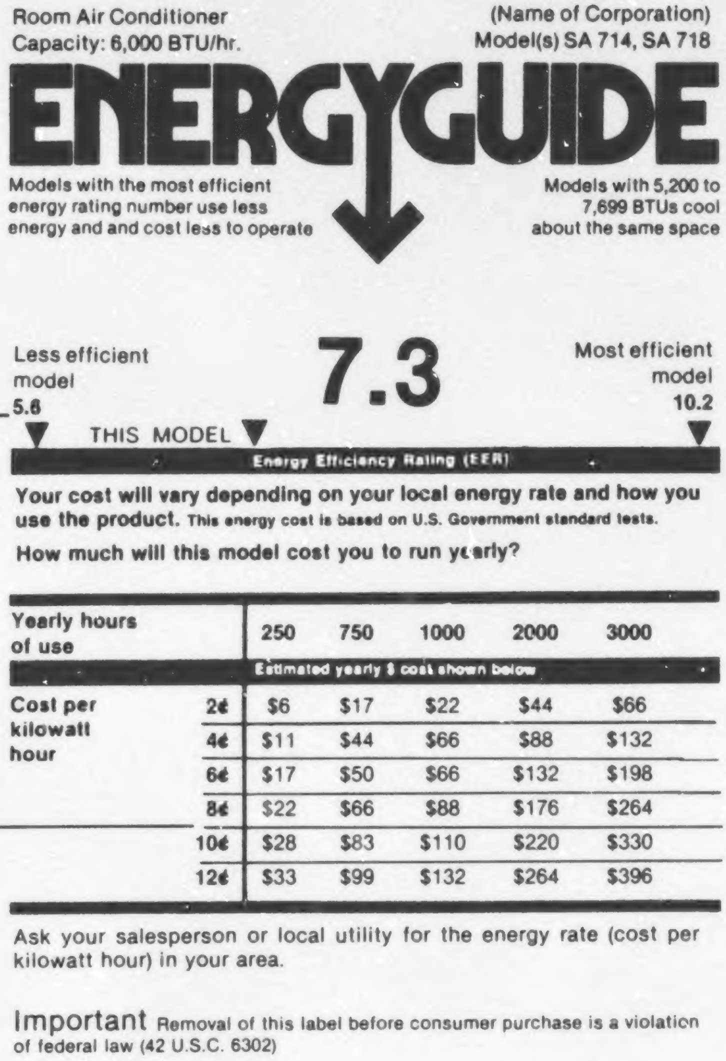
327

ENERGYGUIDE LABELING

Information should include:

Estimates of energy efficiency or energy cost.

Table showing yearly cost figures at various utility rates for various levels of use.



Room Air Conditioner
Capacity: 6,000 BTU/hr.

(Name of Corporation)
Model(s) SA 714, SA 718

ENERGYGUIDE

Models with the most efficient energy rating number use less energy and and cost less to operate

Models with 5,200 to 7,699 BTUs cool about the same space

Less efficient model
5.8

7.3

THIS MODEL

Most efficient model
10.2

Energy Efficiency Rating (EER)

Your cost will vary depending on your local energy rate and how you use the product. This energy cost is based on U.S. Government standard tests.

How much will this model cost you to run yearly?

Yearly hours of use		250	750	1000	2000	3000
		Estimated yearly $ cost shown below				
Cost per kilowatt hour	2¢	$6	$17	$22	$44	$66
	4¢	$11	$44	$66	$88	$132
	6¢	$17	$50	$66	$132	$198
	8¢	$22	$66	$88	$176	$264
	10¢	$28	$83	$110	$220	$330
	12¢	$33	$99	$132	$264	$396

Ask your salesperson or local utility for the energy rate (cost per kilowatt hour) in your area.

Important Removal of this label before consumer purchase is a violation of federal law (42 U.S.C. 6302)

T-106

HOW TO FIGURE WHETHER THE ENERGY EFFICIENT MODEL IS A BETTER BUY FOR YOU

		Model B	**Model A**	
		Standard Model	Energy Efficient Model	Difference
Step 1.	Purchase Price	$______	$______	$______
Step 2.	Yearly Cost (from appliance label)	$______	$______	$______
Step 3.	How many years do you expect to keep it?	15 years	15 years	0
	Total Operating Cost (Multiply Yearly Cost by number of years you will keep the appliance, in this case 15 years)	$______	$______	$______
Step 4.	Total cost to you (Add Purchase Price and Total Operating Price)	$______	$______	$______

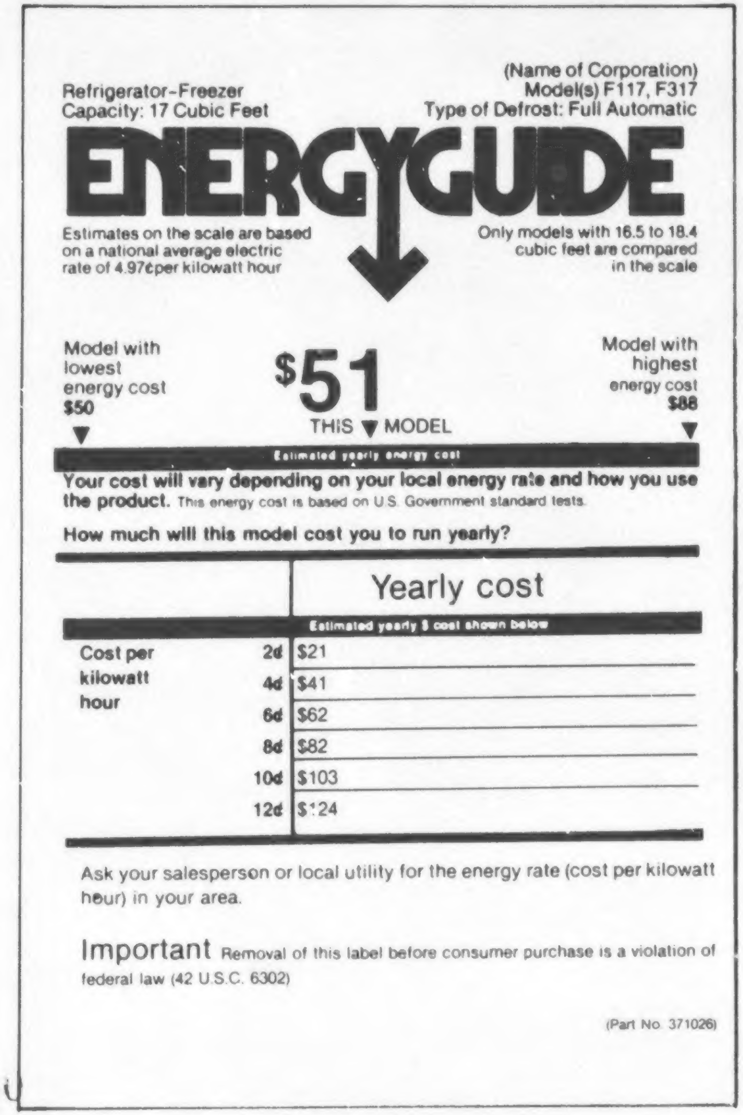
Step 5. To figure how long it will take to recover the extra cost of the energy efficient model, divide the *difference* in price from Step 1 by the *difference* in yearly operating cost from Step 2.

Difference in purchase price ÷ Difference in yearly cost = Years to Recover

$______ ÷ $______ = ______years

ENERGYGUIDE LABELS - SAMPLES

MODEL A
Cost: $545.00



Refrigerator-Freezer
Capacity: 17 Cubic Feet

(Name of Corporation)
Model(s) F117, F317
Type of Defrost: Full Automatic

ENERGYGUIDE

Estimates on the scale are based on a national average electric rate of 4.97¢per kilowatt hour

Only models with 16.5 to 18.4 cubic feet are compared in the scale

Model with lowest energy cost **$50**

$51
THIS ▼ MODEL

Model with highest energy cost **$88**

Estimated yearly energy cost

Your cost will vary depending on your local energy rate and how you use the product. This energy cost is based on U.S. Government standard tests.

How much will this model cost you to run yearly?

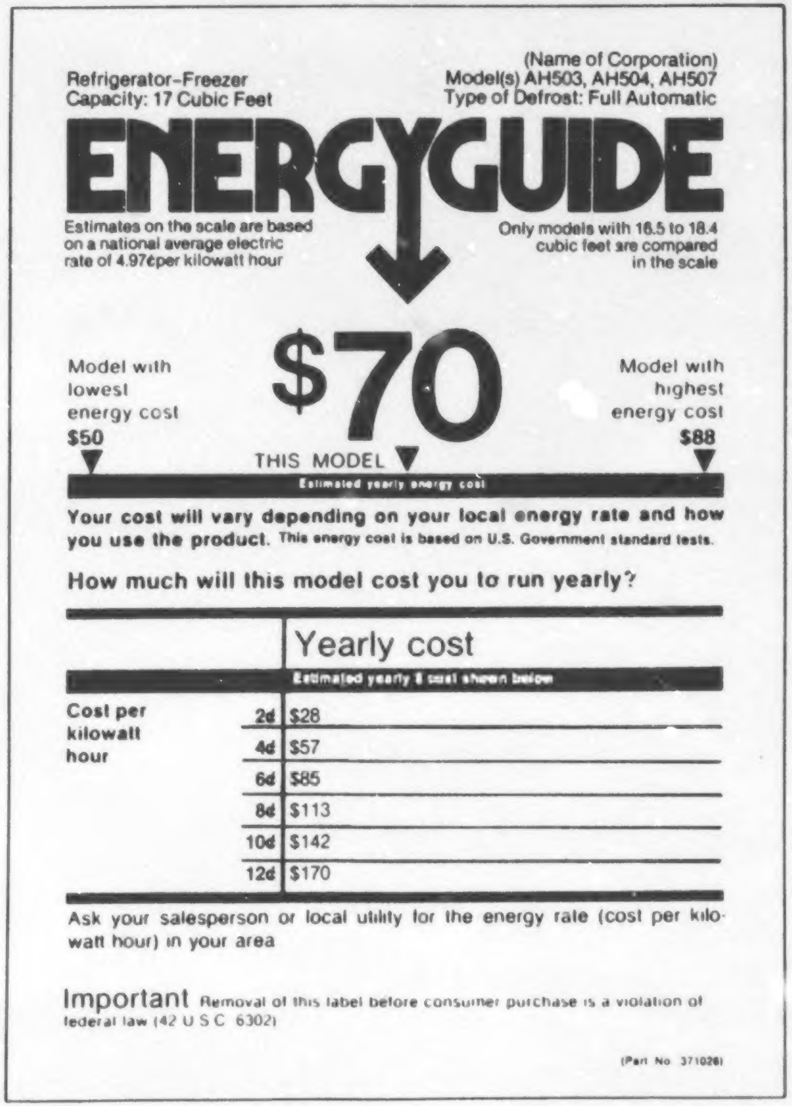
		Yearly cost
		Estimated yearly $ cost shown below
Cost per kilowatt hour	2¢	$21
	4¢	$41
	6¢	$62
	8¢	$82
	10¢	$103
	12¢	$124

Ask your salesperson or local utility for the energy rate (cost per kilowatt hour) in your area.

Important Removal of this label before consumer purchase is a violation of federal law (42 U.S.C. 6302)

(Part No. 371026)

MODEL B
Cost: $485.00



Refrigerator-Freezer
Capacity: 17 Cubic Feet

(Name of Corporation)
Model(s) AH503, AH504, AH507
Type of Defrost: Full Automatic

ENERGYGUIDE

Estimates on the scale are based on a national average electric rate of 4.97¢per kilowatt hour

Only models with 16.5 to 18.4 cubic feet are compared in the scale

Model with lowest energy cost **$50**

$70
THIS MODEL ▼

Model with highest energy cost **$88**

Estimated yearly energy cost

Your cost will vary depending on your local energy rate and how you use the product. This energy cost is based on U.S. Government standard tests.

How much will this model cost you to run yearly?

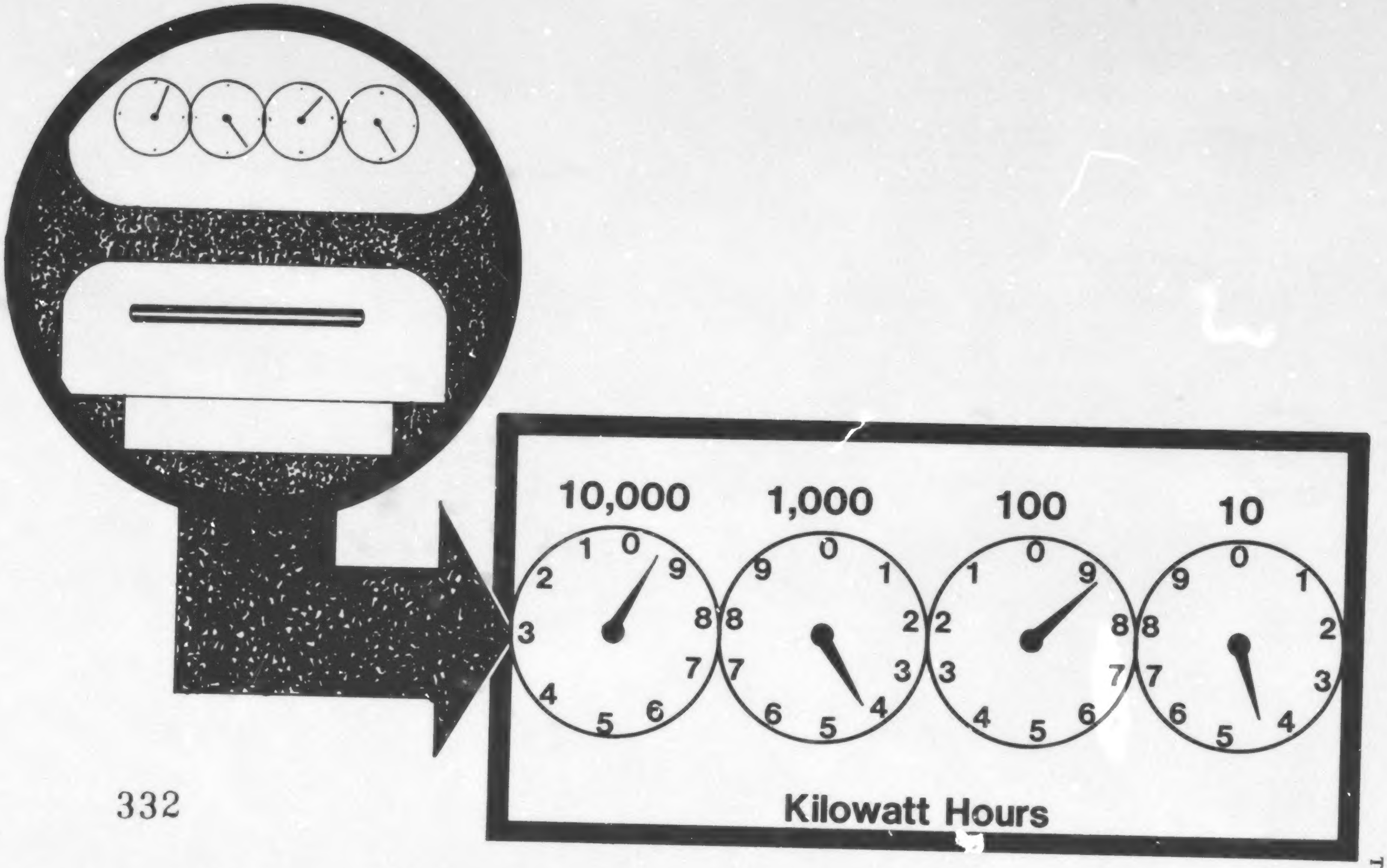
		Yearly cost
		Estimated yearly $ cost shown below
Cost per kilowatt hour	2¢	$28
	4¢	$57
	6¢	$85
	8¢	$113
	10¢	$142
	12¢	$170

Ask your salesperson or local utility for the energy rate (cost per kilowatt hour) in your area

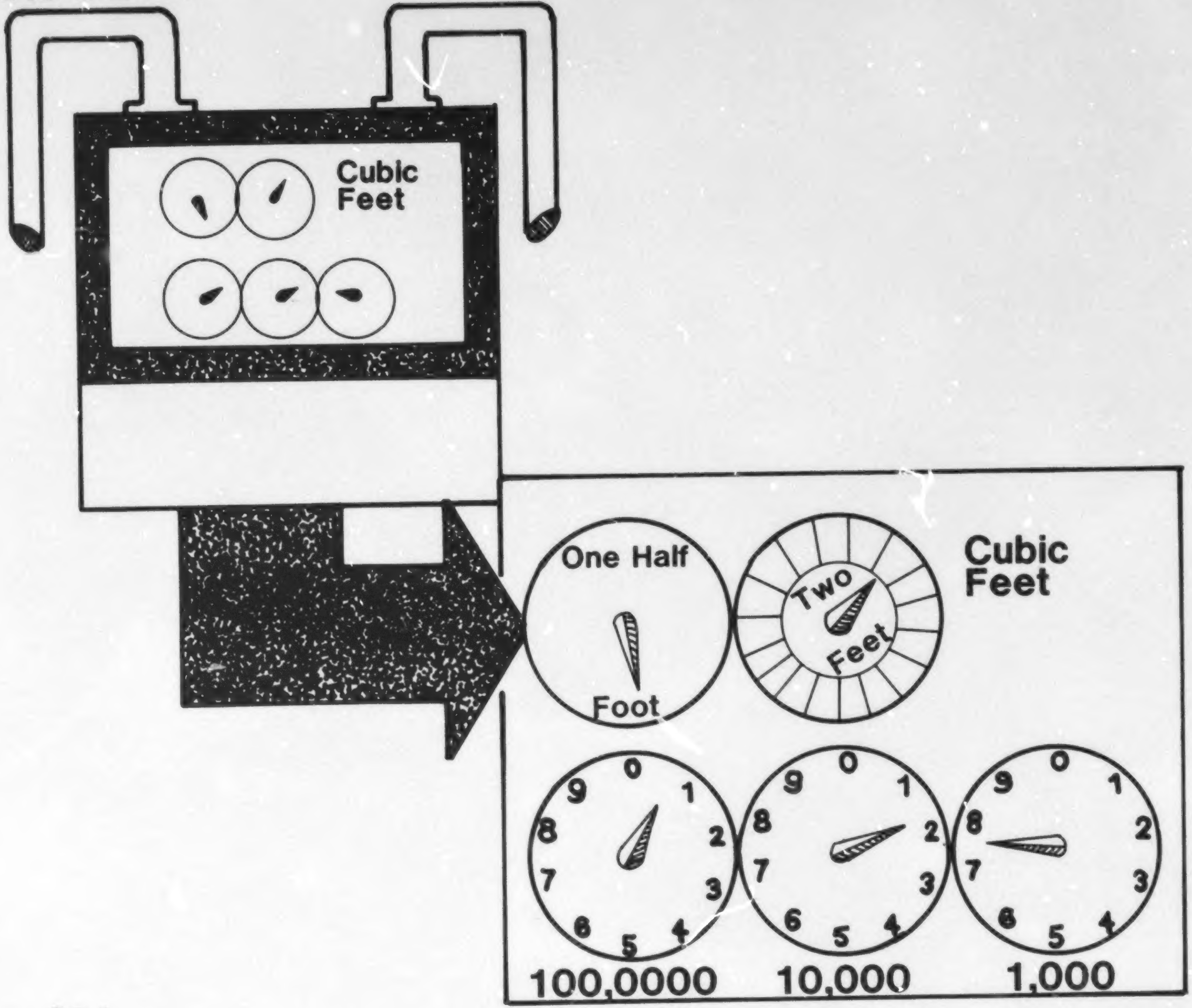
Important Removal of this label before consumer purchase is a violation of federal law (42 U.S.C. 6302)

(Part No. 371026)

ELECTRIC METER

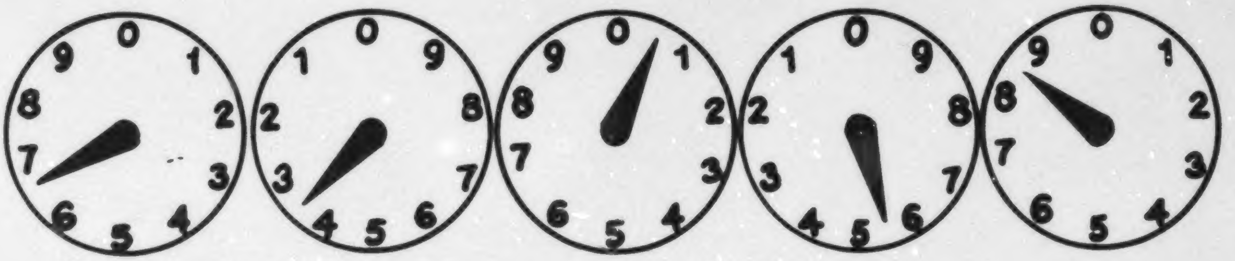

10,000
1,000
100
10
0 1 2 3 4 5 6 7 8 9
Kilowatt Hours

GAS METER

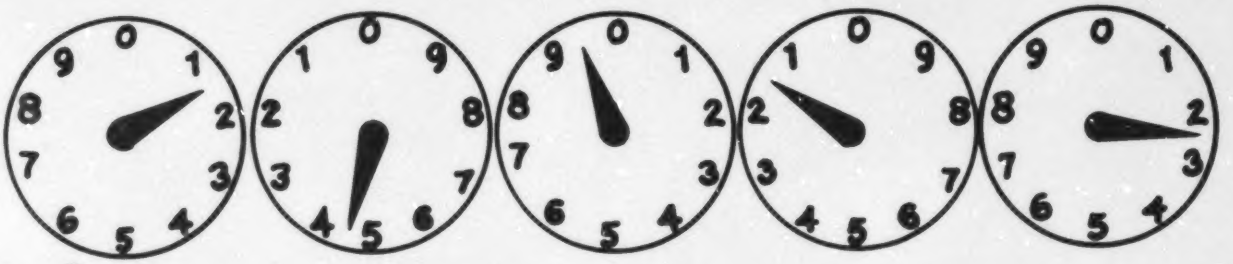

Cubic
Feet
One Half
Foot
Two
Feet
Cubic
Feet
0
1
2
3
4
5
6
7
8
9
100,0000
10,000
1,000

READ THE METER

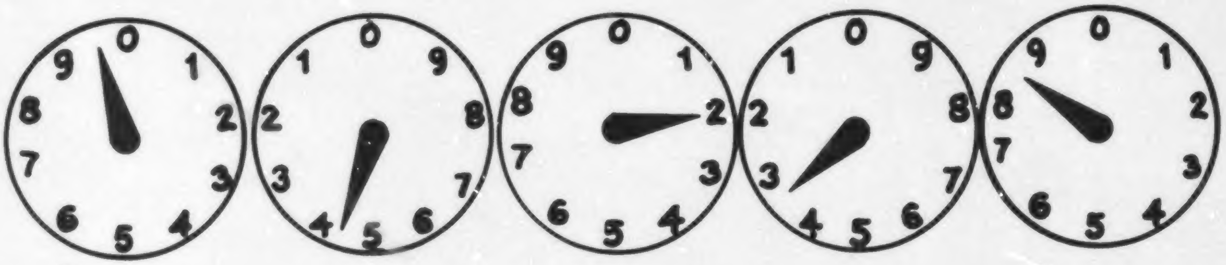
WRITE THE CORRECT NUMBERS ON THE BLANKS PROVIDED.



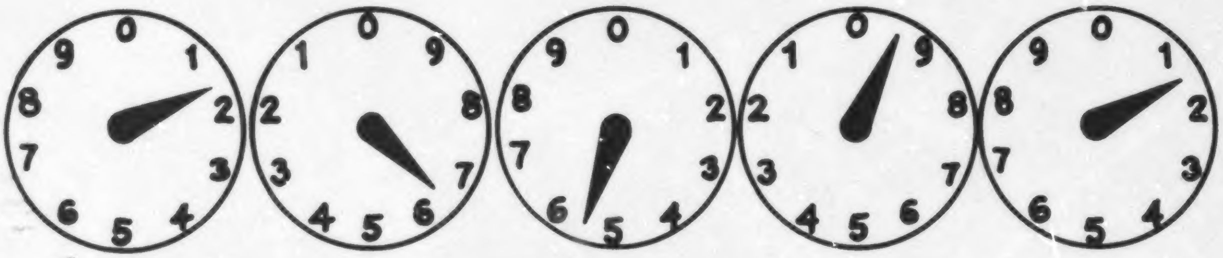
1. ______________________________



2. ______________________________



3. ______________________________



4. ______________________________

T-111

METER READING RECORD

Record the meter reading at the same time for each of seven days. Subtract the readings of the previous day from the present reading to get the kilowatt-hours used.

Day 1 ________________

Day 2 ________________
– Day 1 ________________
KWH used ________________

Day 3 ________________
– Day 2 ________________
KWH used ________________

Day 4 ________________
– Day 3 ________________
KWH used ________________

Day 5 ________________
– Day 4 ________________
KWH used ________________

Day 6 ________________
– Day 5 ________________
KWH used ________________

Day 7 ________________
– Day 6 ________________
KWH used ________________

Weekly Total

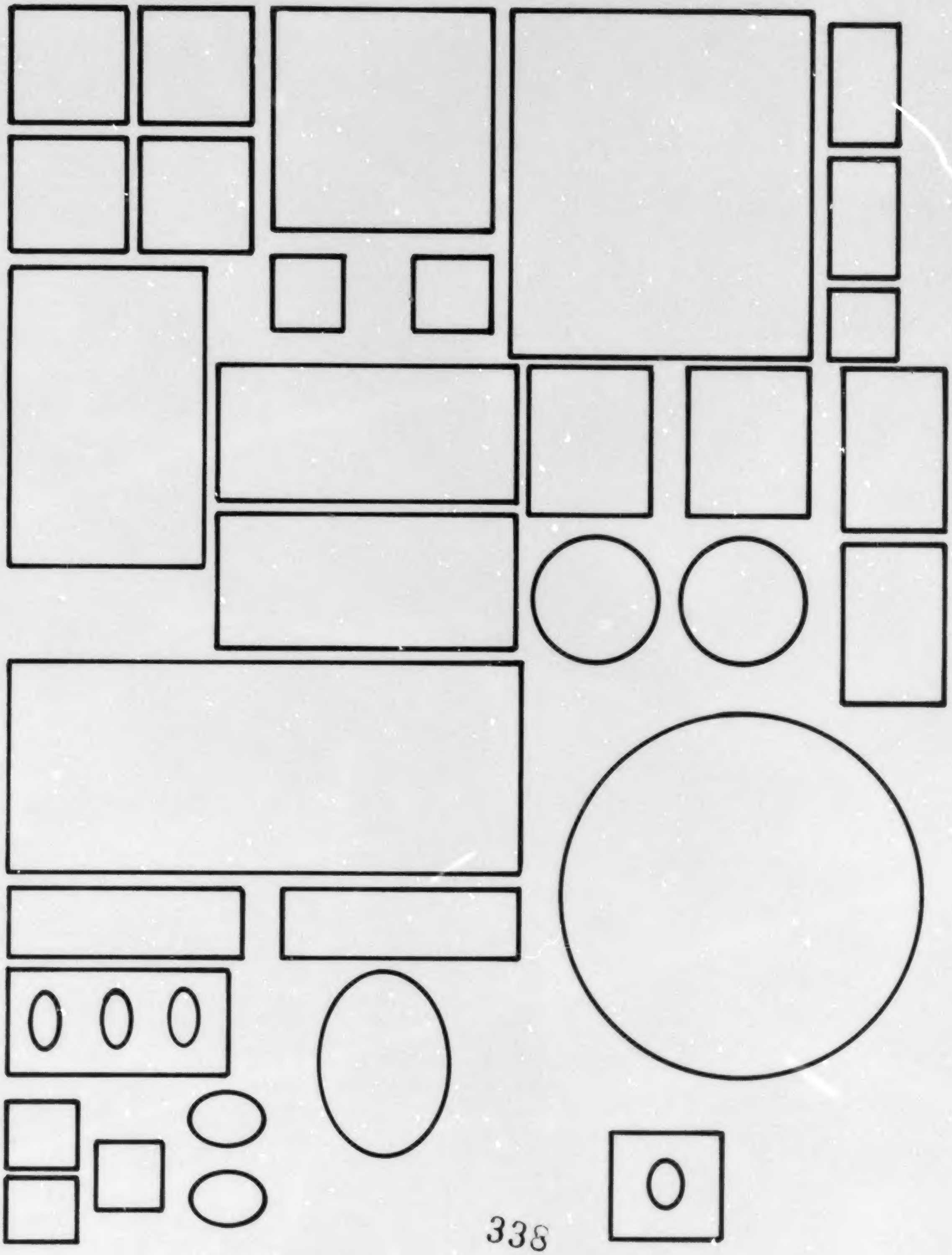
Day 7 reading ________________
– Day 1 reading ________________
Total Weekly Use ________________

Compare energy usage from day to day.

a. On which day of the week was the most energy used? Why?

b. For further involvement, compare the energy usage from week to week. Compare energy usage before practicing energy conservation habits or before and after retrofitting work is done on a home.

WALL DECORATIONS CUTOUTS



338

COMPARISON OF RELATIVE COSTS OF BUYING FURNISHINGS USING VARIOUS METHODS OF PAYMENT

Type	Amt.	APR*	Monthly Payments	Years to Repay	Total Int. Charge
Cash	$500	---	------	All due at time of purchase	0
Installment Loan	$500	23½%	$25.25	2	$106.00
Add to Your Home Loan	$500	6½%	$ 2.71	30	$475.00

*Annual Percentage Rate: Lenders are required by law (Truth in Lending Act) to give this information.

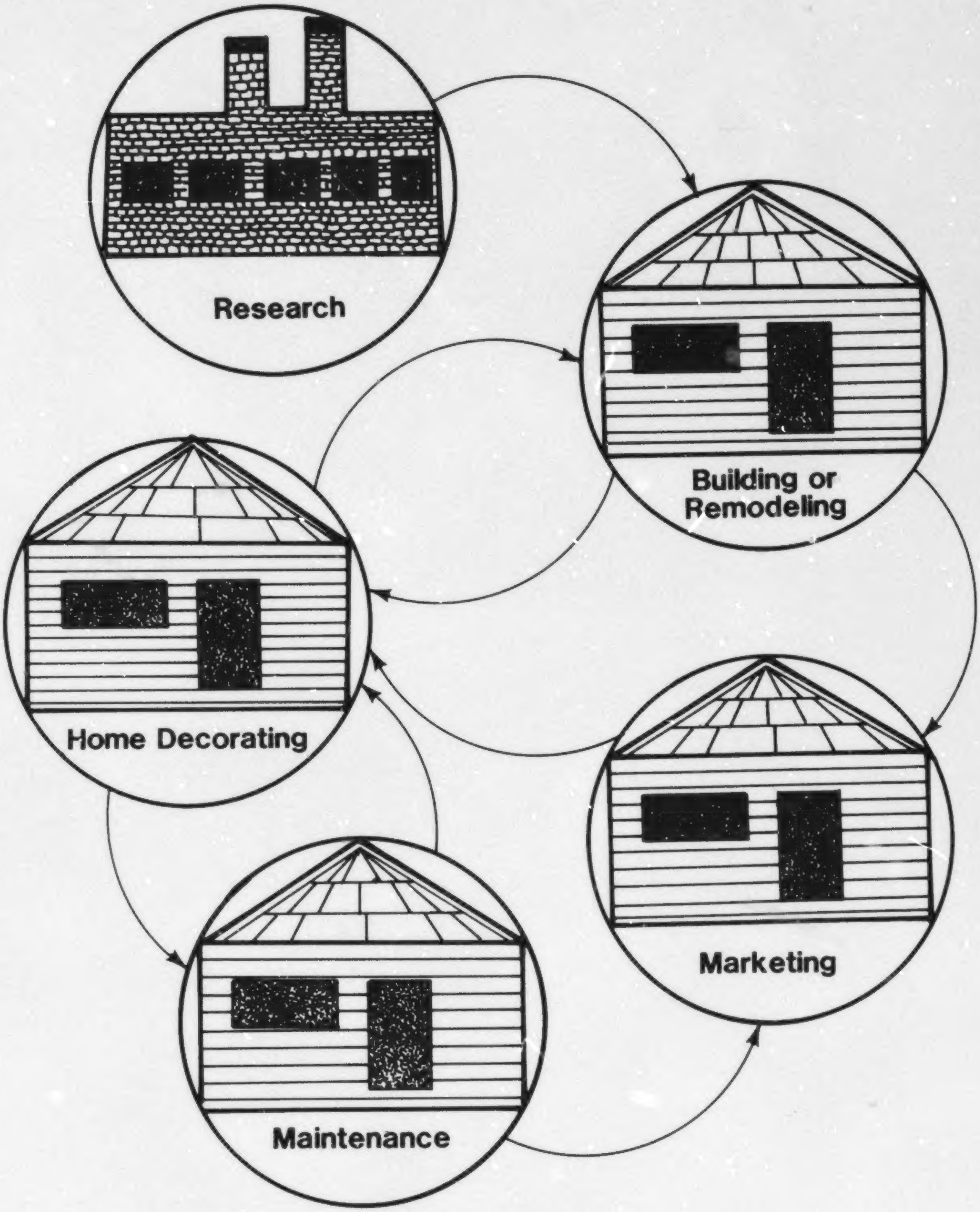
Questions:

1. What are the advantages and disadvantages of each method of payment? Consider resources available, the role values play, etc.

2. Give one example of a time when buying with credit would be a wise economic decision.

3. When is it wiser to wait and save to pay cash?

HOUSING DEVELOPMENT CYCLE . . .


Research
Building or Remodeling
Marketing
Maintenance
Home Decorating

Is There a Career for You?

HOUSING CAREERS

RESEARCH

- Textile technician
- Household products technician
- Laboratory tester

BUILDING AND REMODELING

- **Architect**
- **Draftsperson**

- Carpenter
- Mason
- Insulation installer
- Plumber
- Heat/air condition specialist
- Plasterer
- Dry wall installer

- Painter
- Paper hanger

HOME DECORATING

Interior Designer

- Color coordinator
- Drapery coordinator
- Home lighting coordinator
- Accessories coordinator
- Scenic arts coordinator
- Window display designer
- Floral designer
- Furniture salesperson
- Drapery seamstress
- Slipcover seamstress
- Upholsterer
- Cabinet builder
- Sewing specialist
- Craftsperson
- Furniture refinisher
- Furniture delivery person

Landscape Architect

- Horticulture installer
- Turf installer
- Sprinkler system installer
- Lawn care worker
- Tree trimmer and pruner

MAINTENANCE

- Rug cleaner
- Upholstery cleaner
- Floor cleaner
- Housekeeper

MARKETING

- Real estate agent
- Appraiser
- Home inspector

T-115

HOUSING, HOME FURNISHINGS, AND EQUIPMENT
REFERENCE LIST

Books

Allen, Phyllis Sloan. *Decorate for Living.* Provo, UT: Brigham Young University Press, 1979. 152 pp. ($7.95, l.p. Order from Burgess Publishing Company. Designing effective floor plans; selecting long-lasting, quality fabrics and furniture; conserving energy; and utilizing space effectively. G:10; SBF.)

Allen, Phyllis Sloan. *The Young Decorator.* Provo, UT: Brigham Young University Press, 1979. 219 pp. ($9.95, l.p. Order from Burgess Publishing Company. Home styles and choices, floor plans, basic principles of good design, furniture arrangement, color schemes, budget-stretching ideas, and careers in home decorating. G:10; SBF.)

Chamberlain, Valerie. *Teen Guide.* New York: Webster Division/McGraw-Hill Book Company, 1982. 528 pp. ($14.95, l.p. Homes and families, design and the home, space and storage, home care, health and home safety, and careers in housing. S; G:8; SBF.)

Craig, Hazel Thompson. *Homes with Character*, 4th ed. Lexington, MA: D. C. Heath and Company, 1980. 473 pp. ($11.40, s.p. Development of housing; choosing, furnishing, and maintaining a home; and careers related to housing, design, and home furnishings. S; G:10; SBF.)

Lewis, Evelyn L. *Housing Decisions.* South Holland, IL: The Goodheart-Willcox Company, Inc., 1980. 352 pp. ($10.98, s.p. Housing and life situations, housing choices, design in the home, lighting, furnishings and equipment, exteriors, future housing, and careers in housing. S;G:9; SBF.)

Morton, Ruth. *The Home: Its Furnishings and Equipment*, 2nd ed. New York: Webster Division/McGraw-Hill Book Company, 1979. 512 pp. ($15.63 l.p. Making sensible housing decisions, choosing a home, evaluating the ready-built house, buying and moving, maintenance and remodeling, interior design, selecting and arranging furniture, accessories, and household equipment. G:10; SBF.)

Oppenheim, Irene. *Living Today.* Peoria, IL: Bennett Publishing Company, 1981. 384 pp. ($8.94 s.p. Buying a home, moving, household insurance, and buying home furnishings on a budget. S; G:8; SBF.)

Sherwood, Ruth F. *Homes Today and Tomorrow*, 2nd ed. Peoria, IL: Bennett Publishing Company, 1981. 464 pp. ($12.60 s.p. Human needs and home design, housing styles in the United States, structure of a house, relation of a house to natural resources and the environment, evaluating the basic home, furnishings, interior design, financial aspects of housing, and career opportunities related to housing. S; G:10; SBF.)

S	State adopted textbook	l.p.	list price
G	Grade level readability	s.p.	school price

Periodicals

Better Homes and Gardens. Des Moines, IA: Meredith Corporation. ($12.97 annual rate. Published monthly. Home furnishings, decorating, legal matters, building, grooming, money, health, crafts, food, education, projects, decorating, travel and shopping.)

Family Circle. New York: The Family Circle, Inc. ($12.75 annual rate, 17 issues. Features on decorating, health, home projects, fitness, money management, crafts, foods, and fashions.)

Good Housekeeping. New York: The Hearst Corporation. ($12.97 annual rate. Published monthly. Home furnishings, food, beauty, health, needlework, fashions, home building and decorating, diet and nutrition.)

House and Garden. New York: Conde Nast Publications. ($36.00 annual rate. Published monthly. Decorating, architecture, building, antiques and restorations, crafts, feature articles, food, gardening, beauty and health, travel.)

Pamphlet Sources

American Drew, Inc., P.O. Box 489, North Wilkesboro, NC 28659

Ethan Allen, Inc., Box 1066 D, Danbury, CT 06810

Gillum Book Company, Box 4504 Station C, Kansas City, MO 64124

Kirsh Company, Department SP 275, Sturgis, MI 49091

Kroehler Manufacturing Company, Consumer Education Division, 222 East Fifth, Naperville, IL 60540

National Association of Furniture Manufacturers, Inc., 8401 Connecticut Avenue, Suite 911, Washington, D.C. 20015

Sears, Roebuck and Company, Consumer Information Services, Dept. 703–Sears Tower, Chicago, IL 60684

Southern Furniture Manufacturers Association, P.O. Box 951, High Point, NC 27261

Sunset Books, Lane Publishing Company, Willow and Middlefield Roads, Menlo Park, CA 94025

Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

Teaching Aid Sources

American Drew, Inc., P.O. Box 489, North Wilkesboro, NC 28659

Ethan Allen, Inc., Box 1066-D, Danbury, CT 06810

Fairchild Books and Visuals, 7 East Twelfth Street, New York, NY 10003

*Glencoe Publishing Co., Inc., 17337 Ventura Boulevard, Encino, CA 91316 (Texas teachers send orders to: Glencoe Publishing Co., Inc., 8301 Ambassador Row, Dallas, TX 75247

Home Economics School Service, 10,000 Culver Boulevard, Dept. 83, P.O. Box 802, Culver City, CA 90230

Larimi Communications Associates, Ltd., 151 East 50th Street, New York, NY 10022

McGraw-[illegible] Films, 1221 Avenue of the Americas, New York, NY 10020

Sears, Roebuck and Company, Consumer Information Services, Department 703-Public Relations, [illegible] East Ohio Street, Chicago, IL 60611

S:HE, P.O. Box 7091, Dallas, TX 75201

Serta, Inc., 666 North Lake Shore Drive, Chicago, IL 60611

*formerly Butterick Publishing, then Maclean Hunter Learning Resources.

345

PUBLISHERS LIST

Bennett Publishing Company
809 Detweiller Drive
Peoria, IL 61615

Burgess Publishing Company
7108 Ohms Lane
Minneapolis, MN 55435

Conde Nast Publications
350 Madison Avenue
New York, NY 10017

Family Circle, Inc.
P.O. Box 10752
Des Moines, IA 50340

Goodheart-Willcox Co., Inc.
123 West Taft Drive
South Holland, IL 60473

Hearst Corporation
717 Fifth Avenue
New York, NY 10022

D. C. Heath and Company
Distribution Center
2700 Richardt Avenue
Indianapolis, IN 46219

Meredith Corporation
Consumer Book Division
1716 Locust Street
Des Moines, IA 50336

Webster Division/McGraw-Hill Book Company
1221 Avenue of the Americas
New York, NY 10022
In Texas, orders to:
Gregg/McGraw-Hill
Manchester Road
Manchester, MO 63011